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SB 2-1/2/138-160 MHz-N

Steel-Band Antenna for Portable Equipment in the 2 m Band

- Rugged, flexible steel-band antenna whip.
- Curved sectional area to help keeping the antenna erect.
- Delivered factory tuned and tested to ensure minimum SWR and optimum performance.

Description

- Provided with N (male) connector.
- Matching unit built-in.

Ordering designations

ТҮРЕ	PRODUCT NO.
SB 2-1/2/138-160 MHz-N	140000241

SPECIFICATIONS FOR WHIP INCL. MATCHING UNIT

ELECTRICAL	
MODEL	SB 2-1/2/138-160 MHz-N
ANTENNA TYPE	$\frac{1}{2}$ λ antenna for portable equipment
FREQUENCY	138 - 160 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB (equal to a ¼ λ portable antenna)
BANDWIDTH	≥ 20 MHz @ SWR ≤ 1.5
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	10 W

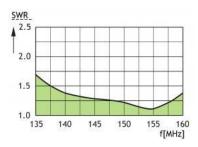
MECHANICAL	





MATERIALS	Whip: Weather- and shockproof plastics Covered stainless steel band N (male) connector: Cu-nite plated brass
COLOUR	Black/Bright
TOTAL HEIGHT	830 mm
WEIGHT	Approx. 145 g
CONNECTOR	N (male)

TYPICAL SWR CURVE







SB 2-1/2/150-160 MHz-N

50 W Steel-Band Antenna for Portable Equipment in the 150 MHz Band

- Rugged, flexible steel-band antenna whip.
- Curved sectional area to help keeping the antenna erect.

- Delivered factory-tuned and tested to ensure minimum SWR and optimum performance.
- Provided with N (male) connector.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.
SB 2-1/2/150-160 MHz-N	140000563

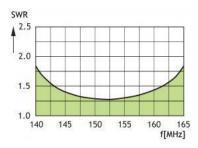
ELECTRICAL	
MODEL	SB 2-1/2/150-160 MHz-N
ANTENNA TYPE	½ λ antenna for portable equipment
FREQUENCY	150 - 160 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB (equal to a ¼ λ portable antenna)
BANDWIDTH	≥ 10 MHz @ SWR ≤ 1.5
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	50 W
MECHANICAL	
MATERIALS	Whip: Weather- and shockproof plastics Covered stainless steel band





	N (male) connector: Cu-nite plated brass
COLOUR	Black/Bright
TOTAL HEIGHT	840 mm
WEIGHT	Approx. 205 g
CONNECTOR	N (male)

TYPICAL SWR CURVE









TFA 400/900/1800-SMA

 $\frac{1}{4}$ λ Triple Frequency Antenna for 400, 900 and 1800 MHz bands Designed for portable equipment

- This antenna makes it possible to operate on 400, 900 and 1800 MHz at the same time on one antenna.
- Flexible antenna element built into an elastic shroud of hard-wearing and weather- and shockproof plastics.

DESCRIPTION

- Ready-tuned and unity gain on all 3 bands.
- Provided with SMA male connector.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
TFA 400/900/1800-SMA	140000240

ELECTRICAL	
MODEL	TFA 400/900/1800-SMA
ANTENNA TYPE	Triple frequency portable antenna
FREQUENCY	380 - 430 MHz 880 - 960 MHz 1710 - 1880 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB compared to a $\frac{1}{4}$ λ portable antenna on the same equpiment
BANDWIDTH	400 MHz : ≥ 50 MHz @ SWR ≤ 2.0 880 - 960 MHz : ≥ 80 MHz @ SWR ≤ 2.0 1710 - 1880 MHz : ≥ 300 MHz @ SWR ≤ 2.5
SWR	400 MHz : < 1.3 @ f. res. 900 MHz : < 1.5 @ f. res. 1800 MHz : < 2.2 @ f. res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Thermoplastic rubber Cu-nite Brass







COLOUR	Black
TOTAL HEIGHT	Approx. 140 mm
WEIGHT	Approx. 20 g
CONNECTOR	SMA (male)







TFA 400/900/1800-FME

 $\frac{1}{4}$ λ Triple Frequency Antenna for 400, 900 and 1800 MHz bands. Designed for portable equipment

- This antenna makes it possible to operate on 400, 900 and 1800 MHz at the same time on one antenna.
- Flexible antenna element built into an elastic shroud of hard-wearing and weather- and shockproof plastics.

DESCRIPTION

- Ready-tuned and unity gain on all three bands.
- Provided with universal FME-connection system for optimum flexibility and with easily exchangeable connectors.
- Designed for use with the following of Procom's line of black FME-connectors (to be ordered separately): BFME-BNC, BFME-TNC, BFME-N, BFME-MUHF, BFME-EBNC, BFME-ETNC and BFME-EMUHF.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
TFA 400/900/1800-FME	140000472

The antenna is delivered factory-tuned. Other frequencies on request.

ELECTRICAL	
MODEL	TFA 400/900/1800-FME
ANTENNA TYPE	Triple-frequency portable antenna
FREQUENCY	380 - 430 MHz 880 - 960 MHz 1710 - 1880 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB compared to a $\frac{1}{4}$ λ portable antenna on the same equpiment
BANDWIDTH	400 MHz : ≥ 50 MHz @ SWR ≤ 2.0 880 - 960 MHz : ≥ 80 MHz @ SWR ≤ 2.0 1710 - 1880 MHz : ≥ 300 MHz @ SWR ≤ 2.5
SWR	400 MHz : < 1.3 @ f. res. 900 MHz : < 1.5 @ f. res. 1800 MHz : < 2.2 @ f. res.
MAX. POWER	25 W
MECHANICAL	





MATERIALS	Thermoplastic rubber Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 130 mm
WEIGHT	Approx. 20 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

RECOMMENDED BFME-CONNECTORS



(To be ordered separately)





SS 70 1/4-QMA

End-Fed $\frac{1}{4}$ λ Monopole Antenna with QMA-Connection System for Portable Equipment in the 415 - 430 MHz Band

- Designed for professional use.
- Full-size ¼ λ whip.
 Highest quality materials in an elegant design.



DESCRIPTION

- Delivered factory-tuned and -tested to ensure minimum SWR and optimum performance.
- Provided with straight bulkhead QMA female connector

ORDERING DESIGNATIONS

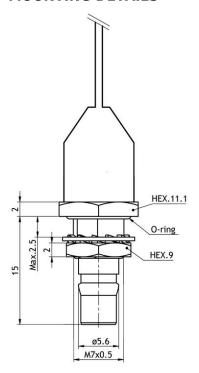
ТҮРЕ	PRODUCT NO.
SS 70 1/4-QMA	140000383

ELECTRICAL	
MODEL	SS 70 1/4-QMA
ANTENNA TYPE	¼ λ antenna for portable equipment etc.
FREQUENCY	415 - 430 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB (compared to a $\frac{1}{4}$ λ portable antenna)
BANDWIDTH	≥ 15 MHz @ SWR ≤ 2.0
SWR	< 1.3 @ f. res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Stainless steel Black-chromed brass
COLOUR	Black / Gold
TOTAL HEIGHT	Approx. 188 mm
WEIGHT	Approx. 38 g
CONNECTOR	QMA (female)
PANEL THICKNESS	Max. 2.5 mm





MOUNTING DETAILS









SB 4/...-FME

Steel-Band Antenna with Universal FME-Connection System for Portable Equipment in the 4 m Band

- Rugged, flexible steel-band antenna whip.
- Curved sectional area to help keeping the antenna erect.

DESCRIPTION

- Shortened ${}^1\!\!/_{\!\!4}$ λ whip yields an acceptable mechanical length.
- Provided with toggle joint and wing screw for easy fold-down.
- Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procoms line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, and BFME-N.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQUENCY
SB 4/I-FME	140000075	66 - 76 MHz
SB 4/m-FME	140000076	72 - 82 MHz
SB 4/h-FME	14000074	78 - 88 MHz

ELECTRICAL	
MODEL	SB 4/FME
ANTENNA TYPE	Shortened $\frac{1}{4}$ λ antenna for portable equipment
FREQUENCY	4 m band covered by three models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
BANDWIDTH	≥ 10 MHz @ SWR ≤ 3.0
SWR	< 2 when mounted directly on portable equipment





MAX. POWER	25 W
MECHANICAL	
MATERIALS	Stainless steel band and rubber Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	650 mm (dep. on type)
WEIGHT	Approx. 85 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

The SB 4 is also available with different thread studs, but in this case with fixed, non-exchangeable connector (not FME-connection system).

Information on these special versions on request.







SB 3/118-137 MHz-BNC

Steel-Band Antenna with BNC-Connection System for the International Aircraft Band

- Rugged, flexible steel-band antenna whip.
- Curved sectional area to help keeping the antenna erect.

DESCRIPTION

- Full-size ¼ λ whip.
- Delivered factory-tuned and -tested to ensure minimum SWR and optimum performance.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.
SB 3/118-137 MHz-BNC	140000460

ELECTRICAL	
MODEL	SB 3/118-137 MHz-BNC
ANTENNA TYPE	¼ λ antenna for portable equipment
FREQUENCY	3 m band
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB (compared to a 1/4 λ portable antenna on the same equipment)
BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.5
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	50 W
MECHANICAL	
MATERIALS	Stainless steel band and rubber Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	570 mm
WEIGHT	Approx. 50 g

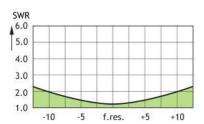






CONNECTOR	BNC (male)	

TYPICAL SWR CURVE







SB 3-1/2/118-136 MHz-N

 $1/2\ \lambda$ Steel-Band Antenna for Portable Equipment in the 3 m International Aircraft Band

- Rugged, flexible steel-band antenna whip.
- Curved sectional area to help keeping the antenna erect.

DESCRIPTION

- Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Provided with N (male) connector.
- Matching unit built-in.

ORDERING DESIGNATIONS

TYPE NO.	PRODUCT NO.
SB 3-1/2/118-136 MHz-N	140000483

SPECIFICATIONS FOR WHIP INCL. MATCHING UNIT

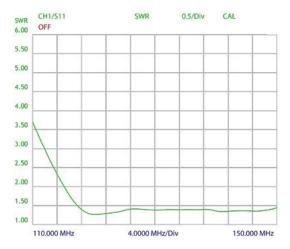
ELECTRICAL		
MODEL	SB 3 1/2/118-136 MHz-N	
ANTENNA TYPE	$rac{1}{2}\lambda$ antenna for portable equipment	
FREQUENCY	118 - 136 MHz	
IMPEDANCE	Nom. 50 Ω	
POLARIZATION	Vertical	
GAIN	3 - 4 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equipment)	
BANDWIDTH	≥ 15 MHz @ SWR ≤ 1.5	
SWR	< 2 when mounted directly on portable equipment	
MAX. POWER	25 W	





MECHANICAL		
MATERIALS	Whip: Weather- and shockproof plastics Covered stainless steel band N (male) connector: Cu-nite plated brass	
COLOUR	Black/Bright	
TOTAL HEIGHT	830 mm	
WEIGHT	Approx. 145 g	
CONNECTOR	N (male)	

TYPICAL SWR CURVE









SB 27 1/4-FME

Steel-Band Antenna with Universal FME-Connection System for Portable Equipment in the 27 MHz Band

- Rugged, flexible steel-band antenna whip.
- Curved sectional area to help keeping the antenna erect.
 Shortened ¼ λ whip yields an acceptable mechanical length.

DESCRIPTION

- Provided with toggle joint and wing screw for easy fold-down.
- Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procoms line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, and BFME-N.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
SB 27 1/4-FME	140000045

ELECTRICAL	
MODEL	SB 27 1/4-FME
ANTENNA TYPE	Shortened ¼ λ antenna for portable equipment
FREQUENCY	27 MHz CB band
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Stainless steel band and rubber Black-chromed brass
COLOUR	Black





TOTAL HEIGHT	Approx. 650 mm
WEIGHT	Approx. 85 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

The SB 27 1/4 is also available with different thread studs, but in this case with fixed, non-exchangeable connector (not FME-connection system). Information on these special versions on request.







SB 2/...-IC-F51

Steel-Band Antenna for ICOM Portable Equipment in the 2 m Band

- Rugged, flexible steel-band antenna whip.
- Curved sectional area to help keeping the antenna erect.

DESCRIPTION

- Full-size $\frac{1}{4} \lambda$ whip.
- Provided with toggle joint and wing screw for easy fold-down.
- Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Especially designed for ICOM IC-F51 (150 MHz band).

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQUENCY
SB 2/I-IC-F51	140000146	144 - 164 MHz
SB 2/h-IC-F51	140000147	155 - 175 MHz

ELECTRICAL		
MODEL	SB 2/IC-F51	
ANTENNA TYPE	½ λ antenna for portable equipment	
FREQUENCY	2 m band covered by two models	
IMPEDANCE	Nom. 50 Ω	
POLARIZATION	Vertical	
GAIN	0 dB (equal to a ¼ λ portable antenna)	
BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.5	
SWR	< 2 when mounted directly on portable equipment	







MAX. POWER	200 W
MECHANICAL	
MATERIALS	Stainless steel band and rubber Weather- and shockproof plastics Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	500 mm (dep. on type)
WEIGHT	Approx. 45 g
CONNECTOR	SMA (male) special for IC-F51







SB 2/...-GP 300

Steel-Band Antenna for Portable Equipment in the 2 m Band

- Rugged, flexible steel-band antenna whip.
- Curved sectional area to help keeping the antenna erect.

DESCRIPTION

- Full-size $\frac{1}{4} \lambda$ whip.
- Provided with toggle joint and wing screw for easy fold-down.
- Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Especially designed for Motorola GP 300, GP 344, GP 360 and GP 388 (150 MHz band) etc.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQUENCY
SB 2/I-GP 300	140000149	144 - 164 MHz
SB 2/h-GP 300	140000143	155 - 175 MHz

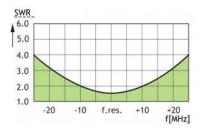
ELECTRICAL		
MODEL	SB 2/GP 300	
ANTENNA TYPE	1/4 λ antenna for portable equipment	
FREQUENCY	2 m band covered by two models	
IMPEDANCE	Nom. 50 Ω	
POLARIZATION	Vertical	
GAIN	0 dB (equal to a ¼ λ portable antenna)	
BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.5	





SWR	< 2 when mounted directly on portable equipment
MAX. POWER	200 W
MECHANICAL	
MATERIALS	Stainless steel band and rubber Weather- and shockproof plastics Black-chromed brass Cu-nite brass
COLOUR	Black
TOTAL HEIGHT	500 mm (dep. on type)
WEIGHT	Approx. 45 g
CONNECTOR	1/4"-32 UNEF

TYPICAL SWR CURVE









SB 2/...-FME

Steel-Band Antenna with Universal FME-Connection System for Portable Equipment in the 2 m Band

- Rugged, flexible steel-band antenna whip.
- Curved sectional area to help keeping the antenna erect.

DESCRIPTION

- Full-size $\frac{1}{4} \lambda$ whip.
- Provided with toggle joint and wing screw for easy fold-down.
- Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procoms line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, BFME-BNC and BFME-ETNC.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQUENCY
SB 2/I-FME	140000148	144 - 164 MHz
SB 2/h-FME	140000144	155 - 175 MHz

ELECTRICAL		
MODEL	SB 2/FME	
ANTENNA TYPE	1/4 λ antenna for portable equipment	
FREQUENCY	2 m band covered by two models	
IMPEDANCE	Nom. 50 Ω	
POLARIZATION	Vertical	
GAIN	0 dB (equal to a 1/4 λ portable antenna)	





BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.5
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	200 W
MECHANICAL	
MATERIALS	Stainless steel band and rubber Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	500 mm (dep. on type)
WEIGHT	Approx. 45 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

The SB 2 is also available with SMA male connector and different thread studs, but in this case with fixed, non-exchangeable connector (not FMEconnection system). Information on these special versions on request.







HX 70/...-IC-F61

Helical Antenna for ICOM Portable Equipment in the 70 cm Band

- Short conical steel helix moulded in flexible thermoplastic rubber.
- Reduced-size ¼ λ helical antenna whip.

DESCRIPTION

- Optimum performance compared to physical dimensions.
- Delivered factory tuned and tested to ensure minimum SWR.
 Especially designed for ICOM IC-F61 (450 MHz band).

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQUENCY
HX 70/s-IC-F61	140000199	380 - 410 MHz
HX 70/I-IC-F61	140000202	400 - 430 MHz
HX 70/m-IC-F61	140000327	420 - 450 MHz
HX 70/h-IC-F61	140000200	440 - 470 MHz

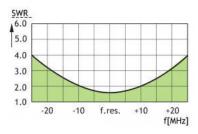
ELECTRICAL	
MODEL	HX 70/IC-F61
ANTENNA TYPE	Shortened ¼ λ helical antenna for portable equipment
FREQUENCY	70 cm band covered by four models
IMPEDANCE	Nom. 50 Ω
POLARISATION	Vertical
GAIN	Approx3 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equipment)
BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.0
SWR	
MAX. POWER	50 W
MECHANICAL	
MATERIALS	Steel helix moulded in flexible thermoplastic rubber Weather- and shockproof plastics Black-chromed brass
COLOUR	Black





TOTAL HEIGHT	Approx. 65 mm (dep. on type)
WEIGHT	Approx. 20 g
CONNECTOR	1/4"-32 UNEF

TYPICAL SWR CURVE









HX 70/...-GP 300

Helical Antenna for Portable Motorola Equipment in the 70 cm Band

- Short conical steel helix moulded in flexible thermoplastic rubber.
- Reduced-size ¼ λ helical antenna whip.

DESCRIPTION

- Optimum performance compared to physical dimensions.
- Delivered factory tuned and tested to ensure minimum SWR.
 Especially designed for Motorola GP 300, GP 344, GP 360 and
- GP 388 (450 MHz band) etc.

ORDERING DESIGNATIONS

TYPE NO.	PRODUCT NO.	FREQUENCY
HX 70/s-GP 300	140000370	380 - 410 MHz
HX 70/I-GP 300	140000369	400 - 430 MHz
HX 70/m-GP 300	140000206	420 - 450 MHz
HX 70/h-GP 300	140000198	440 - 470 MHz

ELECTRICAL	
MODEL	HX 70/GP 300
ANTENNA TYPE	Shortened $\frac{1}{4}$ λ helical antenna for portable equipment
FREQUENCY	70 cm band covered by four models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	Approx3 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equipment)
BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.0
SWR	
MAX. POWER	50 W
MECHANICAL	
MATERIALS	Steel helix moulded in flexible thermoplastic rubber Weather- and shockproof plastics Cu-nite brass
COLOUR	Black



PROCOM



TOTAL HEIGHT	Approx. 65 mm (dep. on type)
WEIGHT	Approx. 20 g
CONNECTOR	1/4"-32 UNEF







HX 70/...-FME

Antenna with Universal FME-Connection System for Portable Equipment in the 70 cm Band

- Short conical steel helix moulded in flexible thermoplastic rubber.
- Reduced-size ¼ λ helical antenna whip.

DESCRIPTION

- Optimum performance compared to physical dimensions.
- Delivered factory tuned and tested to ensure minimum SWR.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procoms line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, BFME-N, BFME-MUHF, BFME-EBNC, BFME-ETNC and BFME-EMUHF.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQUENCY
HX 70/s-FME	140000195	380 - 410 MHz
HX 70/I-FME	140000204	400 - 430 MHz
HX 70/m-FME	140000205	420 - 450 MHz
HX 70/h-FME	140000201	440 - 470 MHz

ELECTRICAL	
MODEL	HX 70/FME
ANTENNA TYPE	Shortened ¼ λ antenna for portable equipment
FREQUENCY	70 cm band covered by four models
IMPEDANCE	Nom. 50 Ω
POLARISATION	Vertical
GAIN	Approx3 dB (equal to a $\frac{1}{4}$ λ portable antenna on the same equipment)
BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.0
SWR	
MAX. POWER	50 W
MECHANICAL	
MATERIALS	Steel helix moulded in flexible thermoplastic rubber Black-chromed brass
COLOUR	Black





TOTAL HEIGHT	Approx. 65 mm (dep. on type)
WEIGHT	Approx. 20 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

The HX 70 is also available with SMA male connector and different thread studs, but in this case with fixed, non-exchangeable connector (not FME-connection system). Information on these special versions on request.







HX 41-SHT-FME

Helical Antenna with Universal FME-Connection System for Portable Equipment in the 41 MHz Band

- Flexible, conical steel helix moulded in thermoplastic rubber.
- Significant reduction of length due to the helical principle.

DESCRIPTION

- Optimum performance compared to physical dimensions.
 Delivered factory-tuned and -tested to ensure minimum SWR.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
 Designed for use with the following of Procom's line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, BFME-N, BFME-EBNC and BFME-ETNC.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
HX 41-SHT-FME	130001890

ELECTRICAL	
MODEL	HX 41-SHT-FME
ANTENNA TYPE	Shortened ¼ λ antenna for portable equipment
FREQUENCY	41 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
SWR	< 3 when mounted directly on portable equipment
MAX. POWER	10 W
MECHANICAL	
MATERIALS	Steel helix moulded in thermoplastic rubber Black-chromed brass





COLOUR	Black
TOTAL HEIGHT	Approx. 240 mm
WEIGHT	Approx. 72 g
CONNECTOR	FME-female (Exchangeable BFME-connectors to be ordered separately)

RECOMMENDED BFME-CONNECTORS



(To be ordered separately)







HX 4/...-FME

Helical Antenna with Universal FME-Connection System for Portable Equipment in the 4 m Band

- Flexible, conical steel helix moulded in thermoplastic rubber.
- Significant reduction of length due to the helical principle.

DESCRIPTION

- Optimum performance compared to physical dimensions.
- Delivered factory tuned and tested to ensure minimum SWR.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
 Designed for use with the following of Procom's line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC and BFME-N.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.	FREQUENCY
HX 4/I-FME	140000067	66 - 76 MHz
HX 4/m-FME	140000072	72 - 82 MHz
HX 4/h-FME	140000064	78 - 88 MHz

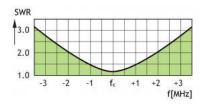
ELECTRICAL	
MODEL	HX 4/FME
ANTENNA TYPE	Shortened ¼ λ antenna for portable equipment
FREQUENCY	4 m band covered by three models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
BANDWIDTH	\geq 6 MHz at f _c @ SWR \leq 3.0
SWR	< 2 @ fc when mounted directly on portable equipment
MAX. POWER	50 W





MECHANICAL	
MATERIALS	Steel helix moulded in thermoplastic rubber Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	290 mm (dep. on type)
WEIGHT	Approx. 80 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

SWR CURVE



RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

The HX 4 is also available with different thread studs, but in this case with fixed, non-exchangeable connector (not FME-connection

system). Information on these special versions on request.







HX 4/2...-FME

Helical Antenna with Universal FME-Connection System for Portable Equipment in the 4 m and 2 m Bands

- Flexible, conical steel helix moulded in thermoplastic rubber.
- Significant reduction of length due to the helical principle.

DESCRIPTION

- Optimum performance compared to physical dimensions.
- Delivered factory tuned and tested to ensure minimum SWR.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procoms line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC and BFME-N.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
HX 4/2/FME	140000073

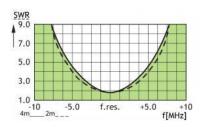
ELECTRICAL	
MODEL	HX 4/2/FME
ANTENNA TYPE	Shortened ¼ λ helical antenna for portable equipment
FREQUENCY	80 MHz band: freq. to be stated within: 6688 MHz 160 MHz band: freq. to be stated within: 144175 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
BANDWIDTH	80 MHz: ≥ 6 MHz @ SWR ≤ 3.0 160 MHz: ≥ 8 MHz @ SWR ≤ 3.0
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	50 W
MECHANICAL	





MATERIALS	Steel helix moulded in thermoplastic rubber Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	290 mm (dep. on type)
WEIGHT	Approx. 80 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

SWR CURVE



RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

The HX 4/2 is also available with different thread studs, but in this case with fixed, non-exchangeable connector (not FME-connection system). Information on these special versions on request.







HX 30 1/4-FME

Helical Antenna with Universal FME-Connection System for Portable Equipment in the 30 MHz Band

- Flexible, conical steel helix moulded in thermoplastic rubber.
- Significant reduction of length due to the helical principle.

DESCRIPTION

- Optimum performance compared to physical dimensions.
- Delivered factory tuned and tested to ensure minimum SWR.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
 Designed for use with the following of Procoms line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, BFME-N, BFME-EBNC and BFME-ETNC.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.
HX 30 1/4-FME	140000052

ELECTRICAL	
MODEL	HX 30 1/4-FME
ANTENNA TYPE	Shortened ¼ λ antenna for portable equipment
FREQUENCY	30 MHz band
IMPEDANCE	Nom. 50 Ω
POLARISATION	Vertical
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	10 W
MECHANICAL	
MATERIALS	Steel helix moulded in thermoplastic rubber Black-chromed brass
	Black Cilionica Brass





COLOUR	Black
TOTAL HEIGHT	Approx. 290 mm
WEIGHT	Approx. 45 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

The HX 30 1/4 is also available with different thread studs, but in this case with fixed, non-exchangeable connector (not FME-connection system). Information on these special versions on request.







HX 27 1/4-FME

Helical Antenna with Universal FME-Connection System for Portable Equipment in the 27 MHz Band

- Flexible, conical steel helix moulded in thermoplastic rubber.
- Significant reduction of length due to the helical principle.

DESCRIPTION

- Optimum performance compared to physical dimensions.
 Delivered factory tuned and tested to ensure minimum SWR.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
 Designed for use with the following of Procoms line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, BFME-N, BFME-EBNC and BFME-ETNC.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
HX 27 1/4-FME	140000043

ELECTRICAL	
MODEL	HX 27 1/4-FME
ANTENNA TYPE	Shortened ¼ λ antenna for portable equipment
FREQUENCY	27 MHz CB band
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
SWR	< 3 when mounted directly on portable equipment
MAX. POWER	10 W
MECHANICAL	
MATERIALS	Steel helix moulded in thermoplastic rubber Black-chromed brass
	Black-chromed brass





COLOUR	Black
TOTAL HEIGHT	Approx. 290 mm
WEIGHT	Approx. 45 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

The HX 27 1/4 is also available with different thread studs, but in this case with fixed, non-exchangeable connector (not FME-connection system). Information on these special versions on request.







HX 2/...-GP 300

Helical Antenna for Portable Equipment in the 2 m Band

- Flexible, conical steel helix moulded in flexible thermoplastic rubber.
- Reduced-size $\frac{1}{4}$ λ helical antenna whip.

DESCRIPTION

- Optimum performance compared to physical dimensions.
- Delivered factory tuned and tested to ensure minimum SWR.
- Especially designed for Motorola GP 300, GP 344, GP 360 and GP 388 (150 MHz band) etc.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQUENCY
HX 2/I-GP 300	140000136	144 - 160 MHz
HX 2/m-GP 300	140000128	152 - 168 MHz
HX 2/h-GP 300	140000127	160 - 175 MHz

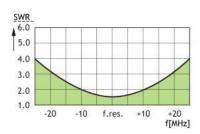
ELECTRICAL		
MODEL	HX 2/GP 300	
ANTENNA TYPE	Shortened $\frac{1}{4}$ λ helical antenna for portable equipment	
FREQUENCY	2 m band covered by three models	
IMPEDANCE	Nom. 50 Ω	
POLARIZATION	Vertical	
GAIN	Approx3 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equipment)	
BANDWIDTH	≥ 16 MHz @ SWR ≤ 3.0	
SWR	< 1.5 when mounted directly on portable equipment	
MAX. POWER	50 W	
MECHANICAL		
MATERIALS	Steel helix moulded in flexible thermoplastic rubber Weather- and shockproof plastics Cu-nite brass	





COLOUR	Black
TOTAL HEIGHT	Approx. 150 mm (dep. on type)
WEIGHT	Approx. 30 g
CONNECTOR	1/4"-32 UNEF

TYPICAL SWR CURVES









HX 2/...-FME

Helical Antenna with Universal FME-Connection System for Portable Equipment in the 2 m Band

- Flexible, conical steel helix moulded in flexible thermoplastic rubber.
- Reduced-size ¼ λ helical antenna whip.

DESCRIPTION

- Optimum performance compared to physical dimensions.
- Delivered factory-tuned and -tested to ensure minimum SWR.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of the Procom line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, BFME-N, BFME-BNC and BFME-ETNC.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.	FREQUENCY
HX 2/I-FME	140000137	144 - 160 MHz
HX 2/m-FME	140000140	152 - 168 MHz
HX 2/h-FME	140000121	160 - 175 MHz

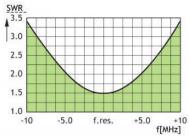
ELECTRICAL	
MODEL	HX 2/FME
ANTENNA TYPE	Shortened ¼ λ helical antenna for portable equipment
FREQUENCY	2 m band covered by three models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	Approx3 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equipment)
BANDWIDTH	≥ 16 MHz @ SWR ≤ 3.0
SWR	< 1.5 when mounted directly on portable equipment
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Steel helix moulded in flexible thermoplastic rubber Black-chromed brass





COLOUR	Black
TOTAL HEIGHT	Approx. 150 mm (dep. on type)
WEIGHT	Approx. 30 g
CONNECTOR	FME-female (Exchangeable BFME-connectors to be ordered separately)

TYPICAL SWR CURVES



RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

The HX 2 is also available with SMA-male connector and different thread studs, but in this case with fixed, non-exchangeable connector (not FME-connection system). Information on these special versions on request.







HX 2/70...-FME

Helical Antenna with Universal FME-Connection System for Portable Equipment in the 2 m and 70 cm Bands

- Flexible, conical steel helix moulded in flexible thermoplastic rubber.
- Reduced-size ¼ λ helical antenna whip.

DESCRIPTION

- Optimum performance compared to physical dimensions.
- Delivered factory tuned and tested to ensure minimum SWR.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procoms line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, BFME-N, BFME-EBNC and BFME-ETNC.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.
HX 2/70/FME	140000123

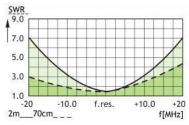
ELECTRICAL	
MODEL	HX 2/70/FME
ANTENNA TYPE	Shortened ${}^{1}\!\!/_{\!\!4}$ λ helical antenna for portable equipment
FREQUENCY	160 MHz band: freq. to be stated within: 144175 MHz 450 MHz band: freq. to be stated within: 380470 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	Approx3 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equipment)
BANDWIDTH	160 MHz: ≥ 16 MHz @ SWR ≤ 3.0 450 MHz: ≥ 25 MHz @ SWR ≤ 3.0
SWR	< 1.6 when mounted directly on portable equipment
MAX. POWER	50 W
MECHANICAL	
MATERIALS	Steel helix moulded in flexible thermoplastic rubber





	Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 150 mm (dep. on type)
WEIGHT	Approx. 30 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

TYPICAL SWR CURVES



RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

The HX 2/70 is also available with SMA male connector and different thread studs, but in this case with fixed, non-exchangeable connector (not FME-connection system). Information on these special versions on request.







GA 70/...-IC-F61

Rubber Antenna for ICOM Portable Equipment in the 70 cm Band

- Sturdy, conical, flexible rubber antenna.Highest quality materials designed for "wear and tear".

- Full-size ¼ λ whip.
- Delivered factory tuned and tested to ensure minimum SWR.
 Especially designed for ICOM IC-F61 (450 MHz band).

ORDERING DESIGNATIONS

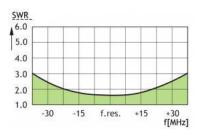
TYPE NO.	PRODUCT NO.	FREQUENCY
GA 70/s-IC-F61	140000189	380 - 430 MHz
GA 70/I-IC-F61	140000193	400 - 450 MHz
GA 70/h-IC-F61	140000191	420 - 470 MHz

ELECTRICAL	
MODEL	GA 70/IC-F61
ANTENNA TYPE	¼ λ antenna for portable equipment
FREQUENCY	70 cm band covered by three models
IMPEDANCE	Nom. 50 Ω
POLARISATION	Vertical
GAIN	0 dB (equal to a ¼ λ portable antenna)
BANDWIDTH	≥ 60 MHz @ SWR ≤ 2.5
SWR	≤ 2 when mounted directly on portable equipment
MAX. POWER	100 W
MECHANICAL	
MATERIALS	Steelwire moulded in thermoplastic rubber Environment-proof plastics Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 140 mm (dep. on type)
WEIGHT	Approx. 30 g
CONNECTOR	SMA (male) special for IC-F61





TYPICAL SWR CURVE









GA 70/...-GP 300

Rubber Antenna for Portable Equipment in the 70 cm Band

- Sturdy, conical, flexible rubber antenna.
- Full size ¼ λ whip.
- Highest quality materials designed for "wear and tear".
- Delivered factory tuned and tested to ensure minimum SWR.
 Especially designed for Motorola GP 300, GP 344, GP 360 and GP 388 (450 MHz band) etc.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQUENCY
GA 70/s-GP 300	140000368	380 - 430 MHz
GA 70/I-GP 300	140000304	400 - 450 MHz
GA 70/h-GP 300	140000305	420 - 470 MHz

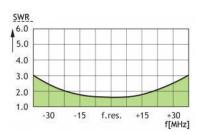
ELECTRICAL	
MODEL	GA 70/GP 300
ANTENNA TYPE	¼ λ antenna for portable equipment
FREQUENCY	70 cm band covered by three models
IMPEDANCE	Nom. 50 Ω
POLARISATION	Vertical
GAIN	0 dB (equal to a $\frac{1}{4}$ λ portable antenna)
BANDWIDTH	≥ 60 MHz @ SWR ≤ 2.5
SWR	≤ 2 when mounted directly on portable equipment
MAX. POWER	100 W
MECHANICAL	
MATERIALS	Steelwire moulded in thermoplastic rubber Weather- and shockproof plastics Black-chromed brass Cu-nite brass
COLOUR	Black
TOTAL HEIGHT	Approx. 140 mm (dep. on type)
WEIGHT	Approx. 30 g





CONNECTOR 1/4"-32 UNEF

TYPICAL SWR CURVE









GA 70/...-FME

Rubber Antenna with Universal FME-Connection System for Portable Equipment in the 70 cm Band

- Sturdy, conical, flexible rubber antenna.
- Full size ¼ λ whip.
- Highest quality materials designed for "wear and tear".
- Delivered factory tuned and tested to ensure minimum SWR.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procoms line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, BFME-N, BFME-MUHF, BFME-EBNC, BFME-ETNC and BFME-EMUHF.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.	FREQUENCY
GA 70/s-FME	140000194	380 - 430 MHz
GA 70/I-FME	140000192	400 - 450 MHz
GA 70/h-FME	140000190	420 - 470 MHz

ELECTRICAL	
MODEL	GA 70/FME
ANTENNA TYPE	1/4 λ antenna for portable equipment
FREQUENCY	70 cm band covered by three models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB (equal to a ¼ λ portable antenna)
BANDWIDTH	≥ 60 MHz @ SWR ≤ 2.5
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	100 W
MECHANICAL	
MATERIALS	Steelwire moulded in thermoplastic rubber Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 140 mm (dep. on type)
WEIGHT	Approx. 30 g





CONNECTOR	FME (female) (Exchangeable BFME-connectors	
	to be ordered separately)	

PLEASE NOTE

The GA 70 is also available with SMA male connector and different thread studs, but in this case with fixed, non-exchangeable connector (not FME-connection system). Information on these special versions on request.







GA 4/...-FME

Rubber Antenna with Universal FME-Connection System for Portable Equipment in the 4 m Band

- Sturdy, conical, flexible rubber antenna.
- Shortened $\frac{1}{4}$ λ whip yields an acceptable mechanical length.

- Highest quality materials designed for "wear and tear".
 Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procoms line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, and BFME-N.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQUENCY
GA 4/I-FME	140000062	66 - 76 MHz
GA 4/m-FME	140000063	72 - 82 MHz
GA 4/h-FME	140000060	78 - 88 MHz

ELECTRICAL	
MODEL	GA 4/FME
ANTENNA TYPE	Shortened ¼ λ antenna for portable equipment
FREQUENCY	4 m band covered by three models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
BANDWIDTH	≥ 10 MHz @ SWR ≤ 3.0
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	25 W
MECHANICAL	





MATERIALS	Steelwire moulded in thermoplastic rubber Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 500 mm (dep. on type)
WEIGHT	Approx. 85 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

The GA 4 is also available with different thread studs, but in this case with fixed, non-exchangeable connector (not FME-connection

system). Information on these special versions on request.







GA 27 1/4-FME

Rubber Antenna with Universal FME-connection System for Portable Equipment in the 27 MHz Band

- Sturdy, conical, flexible rubber antenna.
- Shortened $\frac{1}{4}$ λ whip yields an acceptable mechanical length.

- Highest quality materials designed for "wear and tear".
- Delivered factory tuned and tested to ensure minimum SWR.
- and optimum performance.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procoms line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, and BFME-N.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
GA 27 1/4-FME	140000042

ELECTRICAL	
MODEL	GA 27 1/4-FME
ANTENNA TYPE	Shortened ¼ λ antenna for portable equipment
FREQUENCY	27 MHz CB band
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Steelwire moulded in thermoplastic rubber Black-chromed brass
COLOUR	Black





TOTAL HEIGHT	Approx. 500 mm
WEIGHT	Approx. 85 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

RECOMMENDED BFME-CONNECTORS



(To be ordered seperately)

PLEASE NOTE

The GA 27 1/4 is also available with different thread studs, but in this case with fixed non-excangeable connector (not FME-connection system). Information on these special versions on request.





GA 2/...-IC-F51

Rubber Antenna for ICOM Portable Equipment in the 2 m Band

- Sturdy, conical, flexible rubber antenna.
- Full size ¼ λ whip.

Description

- Highest quality materials designed for "wear and tear".
 Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Especially designed for ICOM IC-F51 (150 MHz band).

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQUENCY
GA 2/I-IC-F51	140000362	144 - 164 MHz
GA 2/h-IC-F51	140000361	155 - 175 MHz

ELECTRICAL	
MODEL	GA 2/IC-F51
ANTENNA TYPE	¼ λ antenna for portable equipment
FREQUENCY	2 m band covered by two models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB (equal to a ¼ λ portable antenna)
BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.5
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	100 W
MECHANICAL	





MATERIALS	Steelwire moulded in thermoplastic rubber Weather- and shockproof plastics Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	450 mm (dep. on type)
WEIGHT	Approx. 60 g
CONNECTOR	SMA (male) special for IC-F51

TYPICAL SWR CURVE







GA 2/...-GP 300

Rubber Antenna for Portable Equipment in the 2 m Band

- Sturdy, conical, flexible rubber antenna.
- Full size ¼ λ whip.

Description

- Highest quality materials designed for "wear and tear".
 Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Especially designed for Motorola GP 300, GP 344, GP 360 and GP 388 (150 MHz band) etc.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQUENCY
GA 2/I-GP 300	140000119	144 - 164 MHz
GA 2/h-GP 300	140000114	155 - 175 MHz

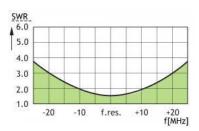
ELECTRICAL	
MODEL	GA 2/GP 300
ANTENNA TYPE	$1/4$ λ antenna for portable equipment
FREQUENCY	2 m band covered by two models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB (equal to a ¼ λ portable antenna)
BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.5
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	100 W





MECHANICAL	
MATERIALS	Steelwire moulded in thermoplastic rubber Weather- and shockproof plastics Black-chromed brass Cu-nite brass
COLOUR	Black
TOTAL HEIGHT	450 mm (dep. on type)
WEIGHT	Approx. 60 g
CONNECTOR	1/4"-32 UNEF

TYPICAL SWR CURVE







GA 2/...-FME

Rubber Antenna with Universal FME-Connection System for Portable Equipment in the 2 m Band

- Sturdy, conical, flexible rubber antenna
- Full size ¼ λ whip.

- Highest quality materials designed for "wear and tear".
 Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procoms line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, BFME-N, BFME-EBNC and BFME-ETNC.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQUENCY
GA 2/I-FME	140000120	144 - 164 MHz
GA 2/h-FME	140000116	155 - 175 MHz

ELECTRICAL	
MODEL	GA 2/FME
ANTENNA TYPE	¼ λ antenna for portable equipment
FREQUENCY	2 m band covered by two models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB (equal to a ¼ λ portable antenna)
BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.5
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	100 W
MECHANICAL	





MATERIALS	Steelwire moulded in thermoplastic rubber Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	450 mm (dep. on type)
WEIGHT	Approx. 60 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

The GA 2 is also available with SMA male connector and different thread studs, but in this case with fixed, non-exchangeable connector (not FMEconnection system). Information on these special versions on request.







DPA 900/2400/...-SMA

Dual Band Portable Antanna for 900 and 2400 MHz Bands

- This antenna makes it possible to operate on 900 and 2400 MHz at the same time on one antenna.
- Flexible antenna element built into an elastic shroud of hard-wearing and weather- and shockproof plastics.

Description

- Ready-tuned and unity gain on both bands.
- Provided with SMA male connector.
- Fixed 2400 MHz and 900 MHz Band within 868 960 MHz.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.
DPA 900/2400/SMA	140000290

ELECTRICAL	
MODEL	DPA 900/2400/SMA
ANTENNA TYPE	Dual Band portable antenna
FREQUENCY	Models within 868 - 960 MHz 2300 - 2500 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB compared to a $\frac{1}{4}$ λ portable antenna on the same equpiment
BANDWIDTH	900 MHz : ≥ 80 MHz @ SWR ≤ 2.0 2400 MHz : ≥ 200 MHz @ SWR ≤ 2.0
SWR	900 MHz : < 1.5 @ f. res. 2400 MHz : < 2.0 @ f. res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Thermoplastic rubber Cu-nite Brass
COLOUR	Black







TOTAL HEIGHT	Approx. 80 mm
WEIGHT	Approx. 10 g
CONNECTOR	SMA (male)









DDEFD 70/...-P0.8-...

Covert Body Antenna for TETRA Band

- Flexible covert body antenna for the TETRA-band.
- Consists of two separate $\frac{1}{2}$ λ antennas for optimal performance.
- A matching unit connects the antennas to only one cable for the portable radio.

Description

- The antenna units have a flexible backside of metal for minimizing the influence of radiation to the body and the bad influence of the body (mismatching).
- For "mounting" the antennas, you can put them in a long pocket in coats, pants or the like.
 Can also be sed as a covert vehicle antenna.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
DDEFD 70/390 MHz-P0.8-MFME	140000382
DDEFD 70/390 MHz-P0.8-SMA(m)	140000493

ELECTRICAL	
MODEL	DDEFD 70/P0.8
ANTENNA TYPE	Dual ½ λ antenna
FREQUENCY	380 - 400 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.5
SWR	< 2.5 when mounted in coat
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Neoprene, POM and brass
COLOUR	Black, brown and gold
TOTAL LENGTH	Approx. 1130 mm
CABLE LENGTH	Connector to matching : Approx. 0.4 m unit
	Antennas to matching unit : Approx. 0.4 m

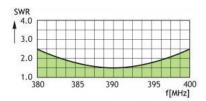




WEIGHT	Approx. 130 g
DIMENSIONS (H x W x L)	Antenna element 10 x 30 x 335 mm
CONNECTOR	MFME or SMA (male)
MOUNTING	In a long pocket in coats, pants or the like



TYPICAL SWR CURVE









CA-TETRA-...

Disguised Antenna for TETRA Band

- Highly flexible, polyethylene covered coaxantenna.
- $\frac{1}{2} \lambda$ skirt dipole antenna.

DESCRIPTION

- Disguised body antenna.
- Especially designed for building-in in coat collars or the like.
- No irritating antenna which can hamper freedom of movement.
- Highest quality materials in an elegant design.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.
CA-TETRA-FSMA	140000498
CA-TETRA-MSMA	140000518

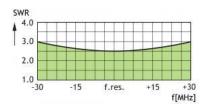
ELECTRICAL	
MODEL	CA-TETRA
ANTENNA TYPE	½ λ antenna
FREQUENCY	380 - 430 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (equal to a ¼ λ portable antenna)
BANDWIDTH	≥ 50 MHz @ SWR ≤ 2.5
SWR	< 2.5 when mounted in coat collar
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Polyethylene covered coax cable Cu-nite brass





COLOUR	Black
TOTAL HEIGHT	Approx. 470 mm
WEIGHT	Approx. 25 g
CONNECTOR	SMA (female or male)

TYPICAL SWR CURVE









DPA 900/1800-FME

 $^{1\!\!/_{\!\!4}}$ λ Dual-Frequency Antenna for 900 and 1800 MHz bands Designed for portable equipment

• This antenna makes it possible to operate on 900 and 1800 MHz at the same time on one antenna.

Description

- Flexible antenna element built into an elastic shroud of hard-wearing and weather- and shockproof plastics.
- Ready-tuned and unity gain on both bands.
- Provided with FME (female) connector.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
DPA 900/1800-FME	140000453

The antenna is delivered factory-tuned. Other frequencies on request.

ELECTRICAL		
MODEL	DPA 900/1800-FME	
ANTENNA TYPE	Dual-frequency portable antenna	
FREQUENCY	880 - 960 MHz 1710 - 1880 MHz	
IMPEDANCE	Nom. 50 Ω	
POLARIZATION	Vertical	
GAIN	0 dB compared to a $1\!\!/\!_4$ λ portable antenna on the same equpiment	
BANDWIDTH	880 - 960 MHz : ≥ 80 MHz @ SWR ≤ 2.0 1710 - 1880 MHz : ≥ 300 MHz @ SWR ≤ 2.5	
SWR	900 MHz : < 1.5 @ f. res. 1800 MHz : < 2.2 @ f. res.	
MAX. POWER	25 W	
MECHANICAL		
MATERIALS	Thermoplastic rubber	





	Cu-nite Brass
COLOUR	Black
TOTAL HEIGHT	Approx. 130 mm
WEIGHT	Approx. 20 g
CONNECTOR	FME (female)

RECOMMENDED BFME-CONNECTORS



(To be ordered separately)







FSP 900/...-SMA

End-Fed ½ λ Dipole Antenna for Portable Equipment in the 900 MHz Band

- Highly flexible polyethylene covered StraightFlex steel wire (self-straightening).
- Full size, end-fed $\frac{1}{2}$ λ antenna whip groundplane independent.

DESCRIPTION

- High gain and efficient decoupling from the portable equipment due to half-wave design.
- 2.15 dBi gain half-wave dipole antenna.
- Highest quality materials in a slender and elegant design.
- Delivered factory tuned to customer specified frequency or cellular system.
- Provided with SMA male connector.

ORDERING DESIGNATIONS

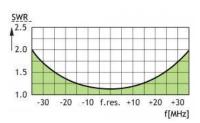
ТҮРЕ	PRODUCT NO.	FREQUENCY
FSP 900/SMA	140000295	820 - 960 MHz

ELECTRICAL		
MODEL	FSP 900/SMA	
ANTENNA TYPE	End-fed ½ λ antenna for portable equipment	
FREQUENCY	900 MHz band (820 - 960 MHz)	
IMPEDANCE	Nom. 50 Ω	
POLARIZATION	Vertical	
GAIN	2.15 dBi 0 dBd	
BANDWIDTH	≥ 70 MHz @ SWR ≤ 2.0	
SWR	< 1.3 @ f. res.	
MAX. POWER	25 W	
MECHANICAL		
MATERIALS	Polyethylene covered flexible steel wire Weather- and shockproof plastics Black-chromed brass	
COLOUR	Black	
TOTAL HEIGHT	Approx. 170 mm (dep. on type)	





WEIGHT	Approx. 25 g
CONNECTOR	SMA (male)









FSP 900/...-FME

End-Fed $\frac{1}{2}$ λ Dipole Antenna with Universal FME-Connection System for Portable Equipment in the 900 MHz Band

- Highly flexible polyethylene covered StraightFlex steel wire (self-straightening).
- Full size, end-fed $\frac{1}{2}$ λ antenna whip groundplane independent.

DESCRIPTION

- High gain and efficient decoupling from the portable equipment due to half-wave design.
- 5 dB gain (typ.) compared to a $\frac{1}{4}\lambda$ antenna whip on the same equipment.
- Highest quality materials in a slender and elegant design.
- Delivered factory tuned to customer specified frequency or cellular system.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procom's line of black FME-connectors (to be ordered separately): BFME-BNC, BFME-TNC, BFME-N, BFME-MUHF, BFME-EBNC, BFME-ETNC and BFME-EMUHF.

ORDERING DESIGNATIONS

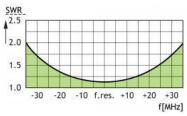
ТҮРЕ	PRODUCT NO.	FREQUENCY
FSP 900/FME	140000231	820 - 960 MHz

ELECTRICAL		
MODEL	FSP 900/FME	
ANTENNA TYPE	End-fed ½ λ antenna for portable equipment	
FREQUENCY	900 MHz band (820 - 960 MHz)	
IMPEDANCE	Nom. 50 Ω	
POLARISATION	Vertical	
GAIN	5 dB (compared to a ¼ λ portable antenna)	
BANDWIDTH	≥ 70 MHz @ SWR ≤ 2.0	
SWR	< 1.3 @ f. res.	
MAX. POWER	25 W	
MECHANICAL		
MATERIALS	Polyethylene covered flexible steel wire Black-chromed brass	
COLOUR	Black	





TOTAL HEIGHT	Approx. 170 mm (dep. on type)
WEIGHT	Approx. 25 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)



RECOMMENDED BFME-CONNECTORS



(To be ordered separately)





FSP 70/TETRA-DESK STAND

End-Fed ½ λ Dipole Antenna for Portable Equipment in TETRA Band

- Highly flexible polyethylene covered StraightFlex steel wire (self-straightening).
- Full-size, end-fed $\frac{1}{2}$ λ antenna whip.
- High gain and efficient decoupling from the portable equipment.

DESCRIPTION

- 0 / 2.15 dBi gain compared to a base station antenna.
- Highest quality materials in an elegant design.
- Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Provided with 4 m cable with FME connector.

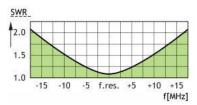
ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
FSP 70/TETRA-DESK STAND	140000401

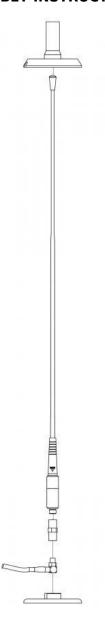
ELECTRICAL		
MODEL	FSP 70/TETRA-DESK STAND	
ANTENNA TYPE	½ λ antenna for portable equipment	
FREQUENCY	TETRA (380 - 410 MHz) other frequencies on request	
IMPEDANCE	Nom. 50 Ω	
POLARIZATION	Vertical	
GAIN	0 dBd / 2.15 dBi (compared to $\frac{1}{2}$ λ dipole)	
BANDWIDTH	≥ 30 MHz @ SWR ≤ 2.5	
SWR	< 1.3 @ f. res.	
MAX. POWER	25 W	
MECHANICAL		
MATERIALS	Polyethylene covered flexible steel wire Black-chromed brass	
COLOUR	Black	
TOTAL HEIGHT	Approx. 390 mm	
WEIGHT	Approx. 150 g	
CONNECTOR	4 m RG 58 low loss cable with FME (female) connector	







ASSEMBLY INSTRUCTION









FSP 70/...-FME

End-Fed $\frac{1}{2}$ λ Dipole Antenna with Universal FME-Connection System for Portable Equipment in the 70 cm Band

- Highly flexible polyethylene covered StraightFlex steel wire (self-straightening).
- Full-size, end-fed $\frac{1}{2}$ λ antenna whip.

DESCRIPTION

- High gain and efficient decoupling from the portable equipment.
- 5 dB gain (typ.) compared to a $\frac{1}{4}\lambda$ antenna whip on the same equipment.
- Highest quality materials in an elegant design.
- Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procom's line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, BFME-N, BFME-EBNC and BFME-ETNC.

ORDERING DESIGNATIONS

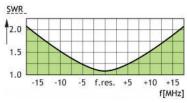
ТҮРЕ	PRODUCT NO.	FREQUENCY
FSP 70/FME	140000182	380 - 470 MHz

ELECTRICAL		
MODEL	FSP 70/FME	
ANTENNA TYPE	½ λ antenna for portable equipment	
FREQUENCY	70 cm band (380 – 470 MHz)	
IMPEDANCE	Nom. 50 Ω	
POLARISATION	Vertical	
GAIN	5 dB (compared to a ¼ λ portable antenna)	
BANDWIDTH	≥ 30 MHz @ SWR ≤ 2.5	
SWR	< 1.3 @ f. res.	
MAX. POWER	25 W	





MECHANICAL	
MATERIALS	Polyethylene covered flexible steel wire Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 340 mm (dep. on type)
WEIGHT	Approx. 50 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)



RECOMMENDED BFME-CONNECTORS









FSP 70 1/4/...-ICOM 1/4

"StraightFlex" Antenna with ICOM 1/4"-32 UNEF-2A Connector for Portable Equipment in the 70 cm Band

- Highly flexible, polyethylene covered with StraightFlex steel wire. Full-size ${}^1\!\!/_4$ λ whip.

DESCRIPTION

- Highest quality materials in an elegant design.Delivered factory tuned and tested to ensure minimum SWR.
- Provided with ICOM 1/4"-32 UNEF-2A connector.

ORDERING DESIGNATIONS

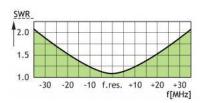
ТҮРЕ	PRODUCT NO.	FREQUENCY
FSP 70 1/4/s-ICOM 1/4"-32	140000178	380 - 430 MHz
FSP 70 1/4/I-ICOM 1/4"-32	140000373	400 - 450 MHz
FSP 70 1/4/h-ICOM 1/4"-32	140000177	420 - 470 MHz

ELECTRICAL		
MODEL	FSP 70 1/4/ICOM 1/4"-32	
ANTENNA TYPE	1/4 λ antenna for portable equipment	
FREQUENCY	70 cm band covered by three models	
IMPEDANCE	Nom. 50 Ω	
POLARISATION	Vertical	
GAIN	0 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equipment)	
BANDWIDTH	≥ 50 MHz @ SWR ≤ 2.0	
SWR	< 2 when mounted directly on portable equipment	





MAX. POWER	100 W
MECHANICAL	
MATERIALS	Polyethylene covered flexible steel wire Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 170 mm (dep. on type)
WEIGHT	Approx. 24 g
CONNECTOR	ICOM 1/4"-32 UNEF-2A









FSP 70 1/4/...-IC-F61

"StraightFlex" Antenna for ICOM Portable Equipment in the 70 cm Band

- Highly flexible, polyethylene covered with StraightFlex steel wire.
- Full-size ¼ λ whip.

DESCRIPTION

- Highest quality materials in an elegant design.
- Delivered factory tuned and tested to ensure minimum SWR.
- Especially designed for ICOM IC-F61 (450 MHz band).

ORDERING DESIGNATIONS

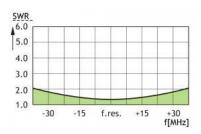
ТҮРЕ	PRODUCT NO.	FREQUENCY
FSP 70 1/4/s-IC-F61	140000174	380 - 430 MHz
FSP 70 1/4/I-IC-F61	140000372	400 - 450 MHz
FSP 70 1/4/h-IC-F61	140000172	420 - 470 MHz

LECTRICAL		
MODEL	FSP 70 1/4/IC-F61	
ANTENNA TYPE	$1/4$ λ antenna for portable equipment	
FREQUENCY	70 cm band covered by three models	
IMPEDANCE	Nom. 50 Ω	
POLARIZATION	Vertical	
GAIN	0 dB (equal to a ¼ λ portable antenna)	
BANDWIDTH	≥ 50 MHz @ SWR ≤ 2.0	
SWR	< 2 when mounted directly on portable equipment	
MAX. POWER	100 W	





MECHANICAL	
MATERIALS	Polyethylene covered flexible steel wire Weather- and shockproof plastics Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 200 mm (dep. on type)
WEIGHT	Approx. 15 g
CONNECTOR	SMA (male) special for IC-F61









FSP 70 1/4/...-GP 300

"StraightFlex" Antenna for ICOM Portable Equipment in the 70 cm Band

- Highly flexible, polyethylene covered StraightFlex steel wire.
- Full-size ¼ λ whip.

DESCRIPTION

- Highest quality materials in an elegant design.
- Delivered factory tuned and tested to ensure minimum SWR.
- Especially designed for Motorola GP 300, GP 344, GP 360 and
 GP 388 (450 MHz band) etc.

ORDERING DESIGNATIONS

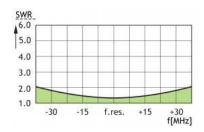
ТҮРЕ	PRODUCT NO.	FREQUENCY
FSP 70 1/4/s-GP 300	140000175	380 - 430 MHz
FSP 70 1/4/I-GP 300	140000265	400 - 450 MHz
FSP 70 1/4/h-GP 300	140000173	420 - 470 MHz

ELECTRICAL		
MODEL	FSP 70 1/4/GP 300	
ANTENNA TYPE	$^{1\!/_{\!\!4}}$ λ antenna for portable equipment	
FREQUENCY	70 cm band covered by three models	
IMPEDANCE	Nom. 50 Ω	
POLARISATION	Vertical	
GAIN	0 dB (equal to a ¼ λ portable antenna)	
BANDWIDTH	≥ 50 MHz @ SWR ≤ 2.0	
SWR	< 2 when mounted directly on portable equipment	





MAX. POWER	100 W
MECHANICAL	
MATERIALS	Polyethylene covered flexible steel wire Weather- and shockproof plastics Cu-nite brass
COLOUR	Black
TOTAL HEIGHT	Approx. 200 mm (dep. on type)
WEIGHT	Approx. 15 g
CONNECTOR	1/4"-32 UNEF









FSP 70 1/4/...-FME

"StraightFlex" Antenna with Universal FME-Connection System for Portable Equipment in the 70 cm Band

- Highly flexible, polyethylene covered StraightFlex steel wire.
- Full-size ¼ λ whip.

DESCRIPTION

- Highest quality materials in an elegant design.
- Delivered factory tuned and tested to ensure minimum SWR.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procoms line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, BFME-N, BFME-MUHF, BFME-EBNC, BFME-ETNC and BFME-EMUHF.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.	FREQUENCY
FSP 70 1/4/s-FME	140000181	380 - 430 MHz
FSP 70 1/4/I-FME	140000184	400 - 450 MHz
FSP 70 1/4/h-FME	140000183	420 - 470 MHz

ELECTRICAL		
MODEL	FSP 70 1/4/FME	
ANTENNA TYPE	¼ λ antenna for portable equipment	
FREQUENCY	70 cm band covered by three models	
IMPEDANCE	Nom. 50 Ω	
POLARISATION	Vertical	
GAIN	0 dB (equal to a ¼ λ portable antenna)	
BANDWIDTH	≥ 50 MHz @ SWR ≤ 2.0	
SWR	< 2 when mounted directly on portable equipment	





MAX. POWER	100 W
MECHANICAL	
MATERIALS	Polyethylene covered flexible steel wire Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 200 mm (dep. on type)
WEIGHT	Approx. 15 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

The FSP 70 1/4 is also available with SMA male connector and different thread studs, but in this case with fixed, non-exchangeable connector (not FME-connection system). Information on these special versions on request.





SB 2-1/2/137.5-149.0 MHz-N

Steel-Band Antenna for portable Equipment in the 160 MHz Band

- Rugged, flexible steel-band antenna whip.
- Curved sectional area to help keeping the antenna erect.

DESCRIPTION

- Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Provided with N (male) connector.
- Matching unit built-in.

ORDERING DESIGNATIONS

TYPE NO.	PRODUCT NO.
SB 2-1/2/137.5-149.0 MHz-N	140000432

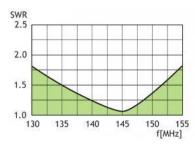
SPECIFICATIONS FOR WHIP INCL. MATCHING UNIT

ELECTRICAL		
MODEL	SB 2-1/2/137.5-149.0 MHz-N	
ANTENNA TYPE	$^{1}\!\!/_{2}$ λ antenna for portable equipment	
FREQUENCY	137.5 - 149.0 MHz	
IMPEDANCE	Nom. 50 Ω	
POLARIZATION	Vertical	
GAIN	-2 dB (equal to a $1\!\!/\!_4$ λ portable antenna on the same equipment)	
BANDWIDTH	≥ 15 MHz @ SWR ≤ 1.5	
SWR	< 2 when mounted directly on portable equipment	
MAX. POWER	10 W	





MECHANICAL	
MATERIALS	Whip: Weather- and shockproof plastics Covered stainless steel band N (male) connector: Cu-nite plated brass
COLOUR	Black/Bright
TOTAL HEIGHT	830 mm
WEIGHT	Approx. 145 g
CONNECTOR	N (male)









FSP 2/...-SMA/TAIT

"StraightFlex" Antenna for TAIT Portable Equipment in the 2 m Band

- Highly flexible, polyethylene-covered StraightFlex steel wire.
- Full size ¼ λ antenna whip.

DESCRIPTION

- Highest quality materials in an elegant and slender design.
 Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Especially designed for TAIT portable radios (SMA-male).

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQUENCY
FSP 2/I-SMA/TAIT	140000413	144 - 164 MHz
FSP 2/h-SMA/TAIT	140000412	155 - 175 MHz
FSP 2/166-174 MHz-SMA/TAIT	140000405	166 - 174 MHz

ELECTRICAL		
MODEL	FSP 2/SMA/TAIT	
ANTENNA TYPE	½ λ antenna for portable equipment	
FREQUENCY	2 m band covered by three models	
IMPEDANCE	Nom. 50 Ω	
POLARIZATION	Vertical	
GAIN	0 dB (equal to a ¼ λ portable antenna)	
BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.5	
SWR	< 2 when mounted directly on portable equipment	
MAX. POWER	100 W	







MECHANICAL	
MATERIALS	Polyethylene-covered flexible steel wire Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 560 mm (dep. on type)
WEIGHT	Approx. 35 g
CONNECTOR	SMA (male) special for TAIT







FSP 4/...-FME

"StraightFlex" Antenna with Universal FME-Connection System for Portable Equipment in the 4 m Band

- Highly flexible, polyethylene covered StraightFlex steel wire.
- Shortened $\frac{1}{4}$ λ antenna whip yields an acceptable mechanical length.

DESCRIPTION

- Highest quality materials in an elegant and slender design.
 Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procoms line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC and BFME-N.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.	FREQUENCY
FSP 4/I-FME	140000057	66 - 76 MHz
FSP 4/m-FME	140000058	72 - 82 MHz
FSP 4/h-FME	140000055	78 - 88 MHz

ELECTRICAL		
MODEL	FSP 4/FME	
ANTENNA TYPE	Shortened ¼ λ antenna for portable equipment	
FREQUENCY	4 m band covered by three models	
IMPEDANCE	Nom. 50 Ω	
POLARIZATION	Vertical	
BANDWIDTH	≥ 10 MHz @ SWR ≤ 3.0	
SWR	< 2 when mounted directly on portable equipment	
MAX. POWER	25 W	





MECHANICAL	
MATERIALS	Polyethylene covered flexible steel wire Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	500 mm (dep. on type)
WEIGHT	Approx. 70 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

The FSP 4 is also available with different thread studs, but in this case with fixed, non-exchangeable connector (not FME-connection system). Information on these special versions on request.







FSP 2/...-IC-F51

"StraightFlex" Antenna for ICOM Portable Equipment in the 2 m Band

- Highly flexible, polyethylene covered StraightFlex steel wire.
- Full size ¼ λ antenna whip.

DESCRIPTION

- Highest quality materials in an elegant and slender design.
 Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Especially designed for ICOM IC-F51 (150 MHz band).

ORDERING DESIGNATIONS

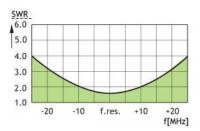
ТҮРЕ	PRODUCT NO.	FREQUENCY
FSP 2/I-IC-F51	140000110	144 - 164 MHz
FSP 2/h-IC-F51	140000111	155 - 175 MHz

ELECTRICAL	
MODEL	FSP 2/IC-F51
ANTENNA TYPE	¼ λ antenna for portable equipment
FREQUENCY	2 m band covered by two models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB (equal to a ¼ λ portable antenna)
BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.5
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	100 W
MECHANICAL	





MATERIALS	Polyethylene covered flexible steel wire Weather- and shockproof plastics Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 540 mm (dep. on type)
WEIGHT	Approx. 35 g
CONNECTOR	SMA (male) special for IC-F51









FSP 2/...-FME

"StraightFlex" Antenna with Universal FME-Connection System for Portable Equipment in the 2 m Band

- Highly flexible, polyethylene covered StraightFlex steel wire.
- Full size ¼ λ antenna whip.

DESCRIPTION

- Highest quality materials in an elegant and slender design.
 Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procoms line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, BFME-N, BFME-EBNC and BFME-ETNC.

ORDERING DESIGNATIONS

TYPE	FREQUENCY	PRODUCT NO.
FSP 2/I-FME	144 - 164 MHz	140000113
FSP 2/h-FME	155 - 175 MHz	140000095

ELECTRICAL	
MODEL	FSP 2/FME
ANTENNA TYPE	¼ λ antenna for portable equipment
FREQUENCY	2 m band covered by two models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB (equal to a $1/4$ λ portable antenna)
BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.5
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	100 W





MECHANICAL	
MATERIALS	Polyethylene covered flexible steel wire Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 490 mm (dep. on type)
WEIGHT	Approx. 35 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

The FSP 2 is also available with SMA male connector and different thread studs, but in this case with fixed, non-exchangeable connector (not FMEconnection system). Information on these special versions on request.







FSP 1300/...-FME

End-Fed $\frac{1}{2}$ λ Dipole Antenna with Universal FME-Connection System for Portable Equipment in the 1300 MHz Band

- Highly flexible polyethylene covered StraightFlex steel wire (self-straightening).
- Full size, end-fed $\frac{1}{2}$ λ antenna whip groundplane independent.

DESCRIPTION

- High gain and efficient decoupling from the portable equipment due to half-wave design.
- 5 dB gain (typ.) compared to a $\frac{1}{4}\lambda$ antenna whip on the same equipment.
- Highest quality materials in a slender and elegant design.
- Delivered factory tuned to customer specified frequency.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procom's line of black FME-connectors (to be ordered separately): BFME-BNC, BFME-TNC, BFME-N, BFME-MUHF, BFME-EBNC, BFME-ETNC and BFME-EMUHF.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
FSP 1300/FME	140000232

ELECTRICAL	
MODEL	FSP 1300/FME
ANTENNA TYPE	End-fed ½ λ antenna for portable equipment
FREQUENCY	1300 MHz band (1200 – 1300 MHz)
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a $\frac{1}{4}$ λ portable antenna)
BANDWIDTH	≥ 70 MHz @ SWR ≤ 2.0
SWR	< 1.3 @ f. res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Polyethylene covered flexible steel wire Black-chromed brass
COLOUR	Black



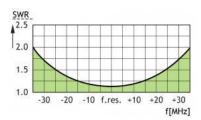


TOTAL HEIGHT	Approx. 150 mm
WEIGHT	Approx. 25 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

RECOMMENDED BFME-CONNECTORS



(To be ordered separately)









FSP 1.5/...-FME

"StraightFlex" Antenna with Universal FME-Connection System for Portable Equipment in the 200 MHz Band

- Highly flexible, polyethylene covered StraightFlex steel wire.
- Full size ¼ λ antenna whip.

DESCRIPTION

- Highest quality materials in an elegant and slender design.
 Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procoms line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, BFME-N, BFME-MUHF, BFME-EBNC, BFME-ETNC and BFME-EMUHF.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.	FREQUENCY
FSP 1.5/I-FME	140000151	175 - 200 MHz
FSP 1.5/m-FME	140000152	190 - 215 MHz
FSP 1.5/h-FME	140000150	200 - 225 MHz

ELECTRICAL	
MODEL	FSP 1.5/FME
ANTENNA TYPE	¼ λ antenna for portable equipment
FREQUENCY	175 - 225 MHz covered by three models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB (equal to a $\frac{1}{4}$ λ portable antenna)
BANDWIDTH	≤ 25 MHz @ SWR ≤ 2.5
SWR	< 2 when mounted directly on portable equipment





MAX. POWER	100 W
MECHANICAL	
MATERIALS	Polyethylene covered flexible steel wire Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 420 mm (dep. on type)
WEIGHT	Approx. 30 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

The FSP 1.5 is also available with SMA male connector and different thread studs, but in this case with fixed, non-exchangeable connector (not FME-connection system). Information on these special versions on request.







FLX 2412/...-SMA

End-Fed ½ λ Dipole Antenna with SMA-Connector for Portable Equipment in the 2400 MHz Band

- Flexible antenna made of steel wire covered with black silicone tubing.
- End-fed $\frac{1}{2}$ λ whip groundplane independent.

DESCRIPTION

- High gain and efficient decoupling from the portable equipment due to half-wave design.
- 5 dB gain compared to a $\frac{1}{4}$ λ antenna whip on the same equipment.
- Highest quality materials in a long-lasting and durable design.
 Models available for the ISM, RLAN, WLAN systems.
- Provided with SMA (male) connector.

ORDERING DESIGNATIONS

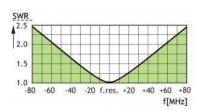
TYPE	PRODUCT NO.
FLX 2412/SMA	140000221

ELECTRICAL	
MODEL	FLX 2412/SMA
ANTENNA TYPE	End-fed ½ λ antenna for portable equipment
FREQUENCY	To be specified within 2300 - 2500 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equpiment)
BANDWIDTH	≥ 100 MHz @ SWR ≤ 2.0
SWR	< 1.3 @ f. res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Silicone tube over flexible steel wire Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 85 mm





WEIGHT	Approx. 22 g
CONNECTOR	SMA (male)









FLX 2412/...-RSMA

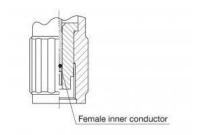
End-Fed $\frac{1}{2}$ λ Dipole Antenna with RSMA-Connector for Portable Equipment in the 2400 MHz Band

- Flexible antenna made of steel wire covered with black silicone tubing.
- End-fed $\frac{1}{2}$ λ whip groundplane independent.

DESCRIPTION

- High gain and efficient decoupling from the portable equipment due to half-wave design. 5 dB gain compared to a $\frac{1}{4}$ λ antenna whip on the same equipment.
- Highest quality materials in a long-lasting and durable design.
 Models available for the ISM, RLAN, WLAN systems.
- Provided with RSMA connector.

RSMA CONNECTOR DETAILS



ORDERING DESIGNATIONS

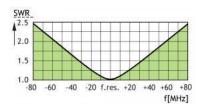
ТҮРЕ	PRODUCT NO.
FLX 2412/RSMA	140000230

ELECTRICAL	
MODEL	FLX 2412/RSMA
ANTENNA TYPE	End-fed $1/2$ λ antenna for portable equipment
FREQUENCY	To be specified within 2300 – 2500 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equpiment)





BANDWIDTH	≥ 100 MHz @ SWR ≤ 2.0
SWR	< 1.3 @ f. res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Silicone tube over flexible steel wire Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 85 mm
WEIGHT	Approx. 22 g
CONNECTOR	RSMA









FLX 2412/...-FME

End-Fed $\frac{1}{2}$ λ Dipole Antenna with Universal FME-Connection System for Portable Equipment in the 2500 MHz Band

- Flexible antenna made of steel wire covered with black silicone tubing.
- End-fed $\frac{1}{2}$ λ whip groundplane independent.

DESCRIPTION

- High gain and efficient decoupling from the portable equipment due to half-wave design.
- 5 dB gain compared to a $\frac{1}{4}$ λ antenna whip on the same equipment.
- Highest quality materials in a long-lasting and durable design.
- Models available for the ISM, RLAN, WLAN systems.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procom's line of black FME-connectors
 (to be ordered separately): BFME-BNC, BFME-TNC, BFME-N, BFME-MUHF, BFME-EBNC, BFME-ETNC and BFME-EMUHF.

ORDERING DESIGNATIONS

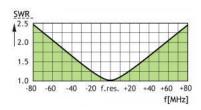
TYPE	PRODUCT NO.
FLX 2412/FME	140000223

ELECTRICAL	
MODEL	FLX 2412/FME
ANTENNA TYPE	End-fed ½ λ antenna for portable equipment
FREQUENCY	To be specified within 2300 - 2500 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equpiment)
BANDWIDTH	≥ 100 MHz @ SWR ≤ 2.0
SWR	< 1.3 @ f. res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Silicone tube over flexible steel wire Black-chromed brass
COLOUR	Black





TOTAL HEIGHT	Approx. 100 mm
WEIGHT	Approx. 22 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)









FLX 1812/...-FME

End-Fed $\frac{1}{2}$ λ Dipole Antenna with Universal FME-Connection System for Portable Equipment in the 1800 MHz Band

- Flexible antenna made of steel wire covered with black silicone tubing.
- End-fed ½ λ whip groundplane independent.
 High gain and efficient decoupling from the portable equipment due to half-wave desian.

DESCRIPTION

- 5 dB gain compared to a $\frac{1}{4}$ λ antenna whip on the same equipment.
- Highest quality materials in a long-lasting and durable design.
 Models available for the DCS-1800/PCN cellular system and for the DECT cordless telephone system.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procom's line of black FME-connectors (to be ordered separately): BFME-BNC, BFME-TNC, BFME-N, BFME-MUHF, BFME-EBNC, BFME-ETNC and BFME-EMUHF.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQEUNCY	PURPOSE/ SYSTEM
FLX 1812/DCS-FME	140000220	1710 - 1880 MHz	DCS-1800/PCN cellular system
FLX 1812/DECT-FME	140000219	1880 - 1900 MHz	DECT cordless telephone

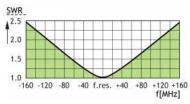
Special frequencies may be quoted on request.

ELECTRICAL	
MODEL	FLX 1812/FME
ANTENNA TYPE	End-fed ½ λ antenna for portable equipment
FREQUENCY	Center frequency to be stated within 1700-1900 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a $^{1}\!\!/_{4}$ λ portable antenna on the same equpiment)
BANDWIDTH	≥ 200 MHz @ SWR ≤ 2.0
SWR	< 1.3 @ f. res.
MAX. POWER	5 W
MECHANICAL	
MATERIALS	Silicone tube over flexible steel wire Black-chromed brass





COLOUR	Black
TOTAL HEIGHT	Approx. 115 mm
WEIGHT	Approx. 25 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)



RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

The FLX 1812 is also available with SMA male connector, but in this case with fixed, nonexchangeable connector (not FME-connection system). Information on this special version on request.







FLX 1300/...-FME

End-Fed $\frac{1}{2}$ λ Dipole Antenna with Universal FME-Connection System for Portable Equipment in the 1300 MHz Band

- Flexible antenna made of steel wire covered with black silicone tubing.
- End-fed ½ λ whip groundplane independent.
 High gain and efficient decoupling from the portable equipment due to half-wave desian.

DESCRIPTION

- 5 dB gain compared to a $\frac{1}{4}$ λ antenna whip on the same equipment.
- Highest quality materials in a long-lasting and durable design.
- Delivered factory tuned to customer specified frequency.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procom's line of black FME-connectors (to be ordered separately): BFME-BNC, BFME-TNC, BFME-N, BFME-MUHF, BFME-EBNC, BFME-ETNC and BFME-EMUHF.

ORDERING DESIGNATIONS

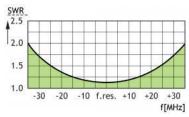
TYPE	PRODUCT NO.
FLX 1300/FME	140000218

ELECTRICAL	
MODEL	FLX 1300/FME
ANTENNA TYPE	End-fed ½ λ antenna for portable equipment
FREQUENCY	1300 MHz band (1200 - 1300 MHz)
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a ¼ λ portable antenna)
BANDWIDTH	≥ 70 MHz @ SWR ≤ 2.0
SWR	< 1.3 @ f. res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Silicone tube over flexible steel wire Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 150 mm





WEIGHT	Approx. 25 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)



RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

The FLX 1300 is also available with SMA male connector, but in this case with fixed, non-exchangeable connector (not FME-connection system). Information on this special version on request.







ELF 900/...-TNC

- Flexible skirt dipole antenna element built into an elastic shroud of hard-wearing and environment-proof plastics.
- "Elevated feed" $\frac{1}{2}$ λ dipole antenna element groundplane independent.

DESCRIPTION

- High gain and efficient decoupling from the portable equipment due to half-wave design.
- 5 dB gain (typ.) compared to a $\frac{1}{4}\lambda$ antenna whip on the same equipment.
- Highest quality materials in a modern "High-Tech" design.
 Delivered factory tuned to customer's specified frequency or cellular system.
- Provided with TNC (male) connector.

ORDERING DESIGNATIONS

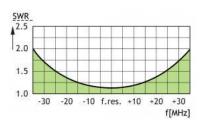
ТҮРЕ	PRODUCT NO.	FREQUENCY
ELF 900/TNC	140000212	To be stated within 850 - 960 MHz
ELF 900/h-TNC	140000604	880 - 960 MHz

ELECTRICAL	
MODEL	ELF 900/TNC
ANTENNA TYPE	Elevated feed ½ λ skirt dipole antenna for portable equipment
FREQUENCY	Models within 850 - 960 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a ¼ λ portable antenna)
BANDWIDTH	≥ 70 MHz @ SWR ≤ 2.0
SWR	< 1.3 @ f. res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Thermoplastic rubber Brass
COLOUR	Black





TOTAL HEIGHT	Approx. 210 mm
WEIGHT	Approx. 40 g
CONNECTOR	TNC









FLX 70/TETRA-EADS

Flexible Antenna with connector specially designed for Siemens TETRA Portable Radios

- Flexible antenna made of steel wire covered with silicone tube.
- Full-size ¼ λ whip.

DESCRIPTION

- Highest quality materials. Delivered factory tuned and tested to ensure minimum SWR.
- Especially designed for Siemens Portativ SMART and
 SiemensEADS G2 SMART.

ORDERING DESIGNATIONS

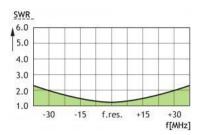
TYPE	PRODUCT NO.
FLX 70/TETRA-EADS	140000158

ELECTRICAL	
MODEL	FLX 70/TETRA-EADS
ANTENNA TYPE	¼ λ antenna for portable equipment
FREQUENCY	TETRA band 380 - 410 MHz
IMPEDANCE	Nom. 50 Ω
POLARISATION	Vertical
GAIN	0 dB (equal to a $\frac{1}{4}$ λ portable antenna)
BANDWIDTH	≥ 60 MHz @ SWR ≤ 2.0
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	200 W
MECHANICAL	





MATERIALS	Silicone tube over steel wire Weather- and shockproof plastics
COLOUR	Black
TOTAL HEIGHT	Approx. 155 mm
WEIGHT	Approx. 18 g
CONNECTOR	"EADS"









ELF 900/1800-TNC

Dual-frequency

- Flexible skirt dipole antenna element built into an elastic shroud of hard-wearing and weather- and shockproof plastics.
- "Elevated feed" ½ λ-dipole antenna element groundplane independent.

DESCRIPTION

- High gain and efficient decoupling from the portable equipment due to half-wave design.
- 5 dB gain (typ.) compared to a $\frac{1}{4}\lambda$ antenna whip on the same equipment.
- Highest quality materials in a modern "High-Tech" design.
 Provided with TNC (male) connector.

ORDERING DESIGNATIONS

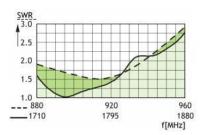
TYPE	PRODUCT NO.
ELF 900/1800-TNC	140000209

ELECTRICAL	
MODEL	ELF 900/1800-TNC
ANTENNA TYPE	Dual-frequency elevated feed ½ λ skirt dipole antenna for portable equipment
FREQUENCY	880 - 960 MHz (EGSM/NMT-900) and 1710 - 1880 MHz (DCS-1800/PCN)
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equpiment)
BANDWIDTH	900 MHz: ≥ 65 MHz @ SWR ≤ 2.0 (typ.) 1800 MHz: ≥ 150 MHz @ SWR ≤ 2.3 (typ.)
SWR	< 1.5 @ f. res. at 900 MHz < 1.1 @ f. res. at 1800 MHz
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Thermoplastic rubber Brass





COLOUR	Black
TOTAL HEIGHT	Approx. 210 mm
WEIGHT	Approx. 40 g
CONNECTOR	TNC (male)









FLX 70/...-IC-F61

Flexible Antenna for ICOM Portable Equipment in the 70 cm Band

- Flexible antenna made of steel wire covered with silicone tube.
- Full-size ¼ λ whip.

DESCRIPTION

- Highest quality materials.
- Delivered factory tuned and tested to ensure minimum SWR.
- Especially designed for ICOM IC-F61 (450 MHz band).

ORDERING DESIGNATIONS

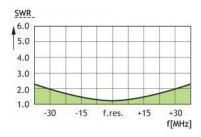
ТҮРЕ	PRODUCT NO.	FREQUENCY
FLX 70/s-IC-F61	140000168	380 - 430 MHz
FLX 70/I-IC-F61	140000376	400 - 450 MHz
FLX 70/h-IC-F61	140000167	420 - 470 MHz

ELECTRICAL	
MODEL	FLX 70/IC-F61
ANTENNA TYPE	$^{1}\!\!/_{\!\!4}$ λ antenna for portable equipment
FREQUENCY	70 cm band covered by three models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB (equal to a ¼ λ portable antenna)
BANDWIDTH	≥ 50 MHz @ SWR ≤ 2.0
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	200 W





MECHANICAL	
MATERIALS	Silicone tube over steel wire Weather- and shockproof plastics Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 200 mm (dep. on type)
WEIGHT	Approx. 25 g
CONNECTOR	SMA (male) special for IC-F61









FLX 70/...-GP 300

Flexible Antenna for Portable Equipment in the 70 cm Band

- Flexible antenna made of steel wire covered with silicone tube.
- Full-size ¼ λ whip.

DESCRIPTION

- Highest quality materials.
- Delivered factory tuned and tested to ensure minimum SWR.
- Especially designed for Motorola GP 300, GP 344, GP 360 and
 GP 388 (450 MHz band) etc.

ORDERING DESIGNATIONS

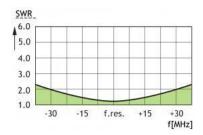
ТҮРЕ	PRODUCT NO.	FREQUENCY
FLX 70/s-GP 300	140000374	380 - 430 MHz
FLX 70/I-GP 300	140000375	400 - 450 MHz
FLX 70/h-GP 300	140000163	420 - 470 MHz

ELECTRICAL	
MODEL	FLX 70/GP 300
ANTENNA TYPE	$^{1\!/_{\!\!4}}$ λ antenna for portable equipment
FREQUENCY	70 cm band covered by three models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB (equal to a ¼ λ portable antenna)
BANDWIDTH	≥ 50 MHz @ SWR ≤ 2.0
SWR	< 2 when mounted directly on portable equipment





MAX. POWER	200 W
MECHANICAL	
MATERIALS	Silicone tube over steel wire Weather- and shockproof plastics Cu-nite brass
COLOUR	Black
TOTAL HEIGHT	Approx. 200 mm (dep. on type)
WEIGHT	Approx. 25 g
CONNECTOR	1/4"-32 UNEF









FLX 400/900-SMA

End-Fed $\frac{1}{2}$ λ Whip on 900 MHz and $\frac{1}{4}$ λ Whip on 400 MHz for Portable Equipment

- Flexible antenna made of steel wire covered with black silicone tubing.
- End-fed $\frac{1}{2}$ λ whip on 900 MHz, and $\frac{1}{4}$ λ whip on 400 MHz.

DESCRIPTION

- High gain and efficient decoupling from the portable equipment due to half-wave design. 5 dB gain on 900 MHz compared to a $\frac{1}{4}$ λ antenna whip on the same equipment.
- Highest quality materials in a long-lasting and durable design.
- Provided with SMA male connector.

ORDERING DESIGNATIONS

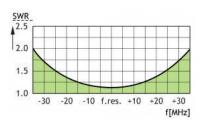
ТҮРЕ	PRODUCT NO.
FLX 400/900-SMA	140000214

ELECTRICAL	
MODEL	FLX 400/900-SMA
ANTENNA TYPE	End-fed $\frac{1}{2}$ λ on 900 MHz and $\frac{1}{4}$ λ on 400 MHz antenna for portable equipment
FREQUENCY	400 MHz band: 270 - 450 MHz 900 MHz band: 830 - 920 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB on 900 MHz (compared to a $1/4~\lambda$ portable antenna on the same equipment)
BANDWIDTH	400 MHz: ≥ 180 MHz @ SWR ≤ 5.0 900 MHz: ≥ 90 MHz @ SWR ≤ 2.0
SWR	< 1.3 @ f. res.





MAX. POWER	25 W
MECHANICAL	
MATERIALS	Silicone tube over flexible steel wire Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 180 mm
WEIGHT	Approx. 30 g
CONNECTOR	SMA (male)









BA 160/GPS

Covert Antenna

- Highly flexible covert coax antenna with black sleeving.
- $\frac{1}{2}$ λ skirt dipole antenna.
- Covert flexible body antenna, supporting free movement.
- Highest quality materials in an elegant design.Antenna available with SMA female connector.
- Also useable for GPS reception.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
BA 160/GPS	140000434
BA 160/GPS-SMA(f)	140000626

ELECTRICAL	
MODEL	BA 160/GPS
ANTENNA TYPE	½ λ antenna
FREQUENCY	150 - 170 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dBi (-5dBi mounted on the body)
BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.5
SWR	< 2.5 when mounted in coat collar
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Coax cable with silica fibre sleeving
COLOUR	White
TOTAL HEIGHT	860 mm
WEIGHT	Approx. 232 g
CONNECTOR	SMA (male) available with SMA (Female)

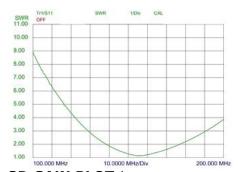




MOUNTING

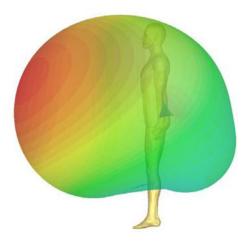
Attached to clothing with two safety pins





3D GAIN PLOT *





* When antenna is mounted in front of chest.







AN 864

Helical Antenna Especially Accomodated to the Stornophone 800 Handportable for the 450 MHz Band

- Short conical steel helix moulded in flexible thermoplastic rubber.
- Reduced-size ¼ λ helical antenna whip.

DESCRIPTION

- Optimum performance compared to physical dimensions.
- Nice and compact design.
- Especially designed for the Stornophone CQP 800
- (450 MHz band).

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.
AN 864	140000155

ELECTRICAL	
MODEL	AN 864
ANTENNA TYPE	Shortened ¼ λ helical antenna
FREQUENCY	Tunable 406 - 470 MHz (tuning done in handportable)
POLARIZATION	Vertical
SWR	≤1.5
MECHANICAL	
MATERIALS	Steel helix moulded in flexible thermoplastic rubber
COLOUR	Black
TOTAL HEIGHT	Approx. 51 mm
WEIGHT	Approx. 16 g
CONNECTOR	M 6 x 0.75 thread stud for Stornophone CQP 800 (450 MHz)







AN 4113/...

Helical Antenna Especially Accomodated to the Stornophone 4000 Handportable for the 150 MHz Band

- Flexible, conical steel helix moulded in flexible thermoplastic rubber.
- Reduced-size ¼ λ helical antenna whip.

DESCRIPTION

- Optimum performance compared to physical dimensions.
- Nice and compact design.
- 5 different models covering band segments of 10 MHz within 145 175 MHz.
- Especially designed for the Stornophone CQP 4000 (150 MHz band).

ORDERING DESIGNATIONS

MODEL	PRODUCT NO.	FREQUENCY RANGE
AN 4113 A	140000363	145 - 155 MHz
AN 4113 B	140000086	150 - 160 MHz
AN 4113 C	140000351	155 - 165 MHz
AN 4113 D	140000364	160 - 170 MHz
AN 4113 E	140000087	165 - 175 MHz

ANTENNA DESIGNATION	AN 4113 Y (Y: see model survey)
CUSTOMER PART NO.	AN 4113 A-E
PORTABLE EQUIPMENT	Stornophone CQP 4000 (150 MHz)
ELECTRICAL	
ANTENNA TYPE	Shortened ¼ λ helical antenna
FREQUENCY	140 - 175 MHz covered by 5 models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
SWR	≤ 2.0 within the 10 MHz segments
MECHANICAL	
MATERIALS	Steel helix moulded in flexible thermoplastic rubber
COLOUR	Black



PROCOM



TOTAL HEIGHT	Approx. 140 mm
WEIGHT	Approx. 28 g
CONNECTOR	M6 x 0.75 thread stud







ELF 2500/...-TNC

- Flexible skirt dipole antenna element built into an elastic shroud of hard-wearing and weather- and shockproof plastics.
- "Elevated feed" $\frac{1}{2}$ λ dipole antenna element groundplane independent.

DESCRIPTION

- High gain and efficient decoupling from the portable equipment due to half-wave design.
- 5 dB gain (typ.) compared to a $\frac{1}{4}\lambda$ antenna whip on the same equipment.
- Highest quality materials in a modern "High-Tech" design.
- Delivered factory tuned to customer's specified frequency.
- Provided with TNC (male) connector.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQUENCY
ELF 2500/TNC	140000211	2300 - 2500 MHz

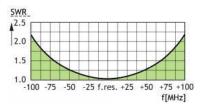
When ordering the antenna, please state the centre frequency.

ELECTRICAL	
ANTENNA TYPE	Elevated feed $\frac{1}{2}$ λ skirt dipole antenna for portable equipment
FREQUENCY	To be specified within 2300 - 2500 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a ¼ λ portable antenna)
BANDWIDTH	≥ 160 MHz @ SWR ≤ 2.0
SWR	< 1.3 @ f. res.
MAX. POWER	25 W
MECHANICAL	
CONNECTOR	TNC
MATERIALS	Thermoplastic rubber Brass
COLOUR	Black
TOTAL HEIGHT	Approx. 190 mm





WEIGHT	Approx. 30 g	









ELF 1800/...-TNC

- Flexible skirt dipole antenna element built into an elastic shroud of hard-wearing and weather- and shockproof plastics.
- "Elevated feed" $\frac{1}{2}$ λ -dipole antenna element groundplane independent.

DESCRIPTION

- High gain and efficient decoupling from the portable equipment due to half-wave design.
- 5 dB gain (typ.) compared to a $\frac{1}{4}\lambda$ antenna whip on the same equipment.
- Highest quality materials in a modern "High-Tech" design.
 Delivered factory tuned to customer's specified frequency or cellular system.
- Provided with TNC (male) connector.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQUENCY/CELLULAR NETWORK
ELF 1800/DCS-TNC	140000272	DCS-1800/PCN
ELF 1800/DECT-TNC	140000249	DECT

Speciel frequencies may be quoted on request.

ELECTRICAL	
MODEL	ELF 1800/TNC
ANTENNA TYPE	Elevated feed $\frac{1}{2}$ λ skirt dipole antenna for portable equipment
FREQUENCY	Center frequency to be stated within 1700 - 2000 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equpiment)
BANDWIDTH	≥ 160 MHz @ SWR ≤ 2.0
SWR	< 1.3 @ f. res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Thermoplastic rubber







	Brass
COLOUR	Black
TOTAL HEIGHT	Approx. 190 mm
WEIGHT	Approx. 30 g
CONNECTOR	TNC (male)







ELF 1300/...-TNC

- Flexible skirt dipole antenna element built into an elastic shroud of hard-wearing and environment-proof plastics.
- "Elevated feed" $\frac{1}{2}$ λ -dipole antenna element groundplane independent.

DESCRIPTION

- High gain and efficient decoupling from the portable equipment due to half-wave design.
- 5 dB gain (typ.) compared to a $\frac{1}{4}\lambda$ antenna whip on the same equipment.
- Highest quality materials in a modern "High-Tech" design.
 Delivered factory tuned to customer's specified frequency.
- Provided with TNC (male) connector.

ORDERING DESIGNATIONS

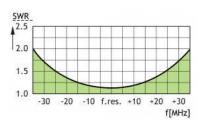
TYPE	PRODUCT NO.
ELF 1300/TNC	140000210

ELECTRICAL	
MODEL	ELF 1300/TNC
ANTENNA TYPE	Elevated feed ½ λ skirt dipole antenna for portable equipment
FREQUENCY	1200 - 1300 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a ¼ λ portable antenna)
BANDWIDTH	≥ 70 MHz @ SWR ≤ 2.0
SWR	< 1.3 @ f. res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Thermoplastic rubber Brass
COLOUR	Black
TOTAL HEIGHT	Approx. 210 mm





WEIGHT	Approx. 40 g
CONNECTOR	TNC









End-Fed $\frac{1}{2}$ λ Dipole Antenna with Universal FME-Connection System for Portable Equipment in the 70 cm Band

- A highly professional antenna in stainless steel material.
- Full-size, end-fed ½ λ antenna whip.

DESCRIPTION

- High gain and efficient decoupling from the portable equipment.
- 5 dB gain (typ.) compared to a ¼ λ antenna whip on the same equipment. Highest quality materials in an elegant design.
- Delivered factory-tuned and tested to ensure minimum SWR and optimum performance.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procom's line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, BFME-N, BFME-EBNC and BFME-ETNC.

ORDERING DESIGNATIONS

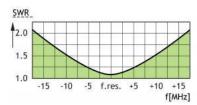
ТҮРЕ	FREQUENCY	PRODUCT NO.
EFSS 70/FME	380 - 470 MHz	140000186

ELECTRICAL	
MODEL	EFSS 70/FME
ANTENNA TYPE	$rac{1}{2}\lambda$ antenna for portable equipment
FREQUENCY	70 cm band (380 – 470 MHz)
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a ¼ λ portable antenna)
BANDWIDTH	≥ 30 MHz @ SWR ≤ 2.0
SWR	< 1.5 @ f. res.





MAX. POWER	25 W
MECHANICAL	
MATERIALS	Stainlees steel Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 340 mm (dep. on type) / 13.3 in.
WEIGHT	Approx. 50 g / 0.11 lb.
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)



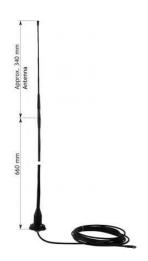
RECOMMENDED BFME-CONNECTORS



(To be ordered separately)







EFD TETRA-1000/...

End-Fed ½ λ Dipole Antenna for TETRA Band

- Flexible $\frac{1}{2}$ λ TETRA-antenna (models within 380 430 MHz).
- The end-fed dipole principle makes the antenna independent of groundplane.

DESCRIPTION

- The radiating part of the antenna is placed on top of a glassfibre tube with shock spring approx. 660 mm above the mounting area.
- The large distance to the mounting area results in an almost perfect radiation, completely independent of the mounting area.
- Permanently attached 5 m RG 58 cable with FME(female) connector.
- Wide range of FME-accessories available.

ORDERING DESIGNATIONS

ТҮРЕ	FREQUENCY	PRODUCT NO.
EFD TETRA-1000/I	380 - 410 MHz	140000610
EFD TETRA-1000/h	410 - 430 MHz	140000580

ELECTRICAL	
MODEL	EFD TETRA-1000/
ANTENNA TYPE	½ λ antenna
FREQUENCY	Models within 380 - 430 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dBd
BANDWIDTH	20 - 30 MHz dep. of model
SWR	< 2.0
MAX. POWER	25 W
MECHANICAL	
MOUNTING	14 mm / 0.55 in. dia. hole
MOUNTING THICKN.	0.7 → 4.5 mm / 0.028 → 0.18 in.





MATERIALS	Black-chromed brass Weather- and shockproof plastics Polyethylene covered flexible steel wire Cu-nite brass, seawater resistant Spring: Black-chromed stainless steel
COLOUR	Black
TEMP. RANGE	-50° C → +70° C
CONNECTOR	5 m RG 58 permanently attached cable with FME (female)
RECOMMENDED INSTALL. TORQUE	8.5 ± 1 Nm
HEIGHT	Approx. 1000 mm / 39.37 in.
OUTER HEIGHT (Mount)	16 mm / 0.63 in.
WIDTH/LENGTH (Mount)	ø55 mm / ø2.17 in.
WEIGHT	Approx. 500 g / 1.10 lb.

FME-SYSTEM ACCESSORIES

FME-CABLES		
ТҮРЕ	PRODUCT NO.	
1 m FME	130000437	
2 m FME	130000447	
3 m FME	130000457	
4 m FME	130000466	
5 m FME	130000474	
6 m FME	130000483	
4 m FME-white	110000064	
6 m FME-white	110000066	
12 m FME-white	110000068	
18 m FME-white	110000069	
FME-CONNECTORS		
ТҮРЕ	PRODUCT NO.	
FME-FME	130000583	
FME-P (Prolongation)	130000565	
FME-N	130000571	
FME-FSMA (Female-SMA)	130000578	
FME-BNC	130000566	
FME-TNC	130000569	
FME-UHF	130000572	
FME-MUHF	130000573	





(Mini-UHF)	
FME-EMUHF (Elbow-MUHF)	130000582
FME-EBNC (Elbow-BNC)	130000580
FME-ETNC (Elbow-TNC)	130000581
FME-SMA	130000577

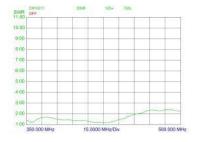
For further information about other types of FME-cables and FME-connectors, please compare the cable and connector data sheets under accessories.



MOUNTING

The gasket should be entirely supported by the mounting plane.

Do not use sealer on rubber gasket or other places.









EFD 4912-SMA

End-Fed ½ λ Dipole Antenna with SMA-Connector for Portable Equipment

• End-fed $\frac{1}{2}$ λ whip - groundplane independent.

DESCRIPTION

- High gain and efficient decoupling from the portable equipment due to half-wave design.
 Highest quality materials in a long-lasting and durable design.
 Provided with SMA (male) connector.

ORDERING DESIGNATIONS

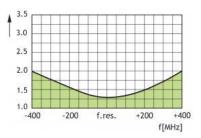
ТҮРЕ	PRODUCT NO.
EFD 4912-SMA	140000433

ELECTRICAL	
MODEL	EFD 4912-SMA
ANTENNA TYPE	End-fed ½ λ antenna for portable equipment
FREQUENCY	4700 - 5100 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
BANDWIDTH	≥ 400 MHz @ SWR ≤ 1.6
SWR	< 1.3 @ f. res.
MAX. POWER	20 W
MECHANICAL	
MATERIALS	Black cover POM Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 70 mm
WEIGHT	Approx. 25 g
CONNECTOR	SMA (male)





TYPICAL SWR CURVES









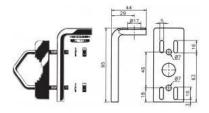
EFD 345

End-Fed ½ λ Dipole Antenna for Portable Equipment

- Black-chromed stainless steel whip with shock spring. Full-size, end-fed $\frac{1}{2}$ λ antenna whip.

DESCRIPTION

- High gain and efficient decoupling from the vehicle.
 5 dB gain (typ.) compared to a ¼ λ antenna whip on the same equipment.



ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.
EFD 345	140000156
YA Mounting Bracket	110000032

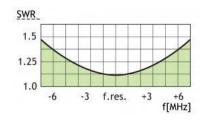
ELECTRICAL	
MODEL	EFD 345
ANTENNA TYPE	$rac{1}{2}$ λ antenna for portable equipment
FREQUENCY	345 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a ¼ λ portable antenna)



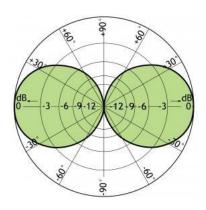


	0 dBd
SWR	< 1.3 @ f. res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Black-chromed stainless steel Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 440 mm
WEIGHT	Approx. 160 g
CONNECTOR	N (female)

TYPICAL SWR CURVE



TYPICAL RADIATION PATTERN (E-PLANE)









EFD 2R/...-TNC

5 dB Portable Antenna for the 160 MHz Band

- End-fed half-wave dipole with a black-chromed, conical stainless steel whip.
- 5 dB gain (typ.) compared to a $\frac{1}{4}$ λ portable antenna whip on the same equipment.

DESCRIPTION

- Groundplane independent due to half-wave design.
 Delivered factory tuned to /l, /m or /h band. See ordering designations.
- Provided with TNC (male) connector.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQUENCY
EFD 2R/I-TNC	140000088	144 - 160 MHz
EFD 2R/m-TNC	140000089	155 - 170 MHz
EFD 2R/h-TNC	140000090	160 - 175 MHz

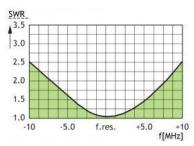
ELECTRICAL	
MODEL	EFD 2R/TNC
ANTENNA TYPE	End-fed ½ λ dipole mobile antenna
FREQUENCY	2 m band covered by three models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equipment)
BANDWIDTH	≥ 15 MHz @ SWR ≤ 2.5
SWR	< 1.3 @ f. res.



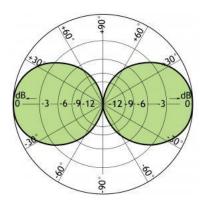


MAX. POWER	25 W
MECHANICAL	
MATERIALS	Black-chromed, conical stainless steel Black-chromed brass
COLOUR	Black
HEIGHT	Approx. 960 mm
WEIGHT	Approx. 100 g
CONNECTOR	TNC (male)

TYPICAL SWR CURVES



TYPICAL RADIATION PATTERN (E-PLANE)









EFD 2412/...-SMA

End-Fed ½ λ Dipole Antenna with SMA-Connector for Portable Equipment in the 2400 MHz Band

- End-fed $\frac{1}{2}$ λ whip groundplane independent. High gain and efficient decoupling from the portable equipment due to half-wave design.

DESCRIPTION

- 5 dB gain compared to a $\frac{1}{4}$ λ antenna whip on the same equipment.
- Highest quality materials in a long-lasting and durable design.
- Models available for the ISM, RLAN, WLAN systems.
 Provided with SMA (male) connector.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
EFD 2412/SMA	140000225

When ordering the antenna, please state the centre frequency.

EFD 2412/SMA
End-fed ½ λ antenna for portable equipment
To be specified within 2300 – 2500 MHz
Nom. 50 Ω
Vertical
5 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equpiment)







BANDWIDTH	≥ 100 MHz @ SWR ≤ 1.7
SWR	< 1.3 @ f. res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Black cover POM Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 110 mm
WEIGHT	Approx. 22 g
CONNECTOR	SMA (male)







EFD 2412/...-RSMA

End-Fed ½ λ Dipole Antenna with RSMA-connector for Portable Equipment in the 2400 MHz Band

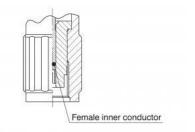
- End-fed $\frac{1}{2}$ λ whip groundplane independent. High gain and efficient decoupling from the portable equipment due to half-wave design.

DESCRIPTION

- 5 dB gain compared to a ¼ λ antenna whip on the same equipment.
 Highest quality materials in a long-lasting and durable design.
 Models available for the ISM, RLAN, WLAN systems.

- Provided with RSMA connector.

RSMA CONNECTOR DETAILS



ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.
EFD 2412/RSMA	140000229

When ordering the antenna, please state the centre frequency.

ELECTRICAL	
MODEL	EFD 2412/RSMA
ANTENNA TYPE	End-fed ½ λ antenna for portable equipment
FREQUENCY	To be specified within 2350 - 2550 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a ¼ λ portable antenna







	on the same equpiment)
BANDWIDTH	≥ 100 MHz @ SWR ≤ 1.7
SWR	< 1.3 @ f. res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Black cover POM Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 110 mm
WEIGHT	Approx. 22 g
CONNECTOR	RSMA







EFD 2412/2450-SMA GOLD

End-Fed ½ λ Dipole Antenna with SMA-Connector for Portable Equipment in the 2450 MHz Band

- End-fed $\frac{1}{2}$ λ whip groundplane independent. High gain and efficient decoupling from the portable equipment due to half-wave design.

DESCRIPTION

- 5 dB gain compared to a $\frac{1}{4}$ λ antenna whip on the same equipment. Highest quality materials in a long-lasting and durable design.
- Models available for the ISM, RLAN, WLAN systems.
- Provided with SMA (male) connector.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
EFD 2412/2450-SMA GOLD	140000224

ELECTRICAL	
MODEL	EFD 2412/2450-SMA GOLD
ANTENNA TYPE	End-fed ½ λ antenna for portable equipment
FREQUENCY	2400 - 2500 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equpiment)
BANDWIDTH	≥ 100 MHz @ SWR ≤ 1.8
SWR	< 1.3 @ 2450 MHz
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Black cover POM Black-chromed brass gold plated
COLOUR	Black and gold
TOTAL HEIGHT	Approx. 110 mm





WEIGHT	Approx. 22 g
CONNECTOR	SMA (male)







5 dB Portable Antenna for the 200 MHz Band

- End-fed half-wave dipole with a black-chromed, conical stainless steel whip.
- 5 dB gain (typ.) compared to a $\frac{1}{4}$ λ portable antenna whip on the same equipment.

DESCRIPTION

- Groundplane independent due to half-wave design.
 Delivered factory tuned to /l, /m or /h band. See ordering designations.
- Provided with TNC (male) connector.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQUENCY
EFD 200R/I-TNC	140000096	185 - 200 MHz
EFD 200R/m-TNC	140000097	200 - 215 MHz
EFD 200R/h-TNC	140000092	215 - 230 MHz

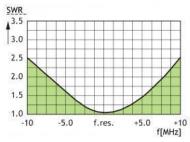
ELECTRICAL	
MODEL	EFD 200R/TNC
ANTENNA TYPE	TYPE End-fed ½ λ dipole mobile antenna
FREQUENCY	2 m band covered by three models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equipment)
BANDWIDTH	≥ 15 MHz @ SWR ≤ 2.0
SWR	< 1.3 @ f. res.



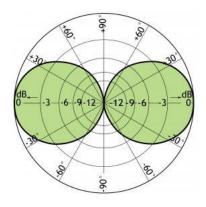


MAX. POWER	25 W
MECHANICAL	
MATERIALS	Black-chromed, conical stainless steel Black-chromed brass
COLOUR	Black
HEIGHT	Approx. 750 mm (dep. on type)
WEIGHT	Approx. 70 g
CONNECTOR	TNC (male)

TYPICAL SWR CURVES



TYPICAL RADIATION PATTERN (E-PLAN)









EFD 1800/...-FME

End-Fed $\frac{1}{2}$ λ Dipole Antenna with FME-Connector for Portable Equipment in the 1800 - 1880 MHz Band

- End-fed $\frac{1}{2}$ λ whip in the 1800 1880 MHz band groundplane independent.
- High gain and efficient decoupling from the portable equipment due to half-wave design.
- 5 dB gain compared to a $\frac{1}{4}$ λ antenna whip on the same equipment.

DESCRIPTION

- Highest quality materials in a long-lasting and durable design.
- Provided with FME (female) connector.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQUENCY
EFD 1800/FME	140000404	1800 - 1880 MHz

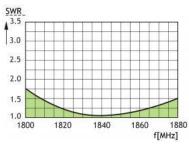
ELECTRICAL	
MODEL	EFD 1800/FME
ANTENNA TYPE	End-fed ½ λ antenna for portable equipment
FREQUENCY	1800 - 1880 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equpiment)
BANDWIDTH	< 2 (1800 - 1880 MHz)
SWR	< 1.3 @ f. res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Black cover HDPE Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 135 mm
WEIGHT	Approx. 25 g





CONNECTOR FME (female)

TYPICAL SWR CURVES



RECOMMENDED BFME-CONNECTORS



(To be ordered separately)







EFD 1800/DECT-SMA

End-Fed ½ λ Dipole Antenna with SMA-Connector for Portable Equipment in the DECT Band

- End-fed $\frac{1}{2}$ λ whip in the DECT band groundplane independent.
- High gain and efficient decoupling from the portable equipment due to half-wave design.

DESCRIPTION

- 5 dB gain compared to a $^1\!\!/_{\!4}$ λ antenna whip on the same equipment.
- Highest quality materials in a long-lasting and durable design.
 Provided with SMA (male) connector.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.
EFD 1800/DECT-SMA	140000154

ELECTRICAL	
MODEL	EFD 1800/DECT-SMA
ANTENNA TYPE	End-fed ½ λ antenna for portable equipment
FREQUENCY	1880 - 1900 MHz (DECT)
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equpiment)
BANDWIDTH	≥ 50 MHz @ SWR ≤ 1.5
SWR	< 1.3 @ f. res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Black cover POM Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 135 mm
WEIGHT	Approx. 25 g

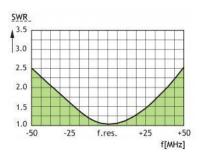




CONNECTOR	SMA (male)	

TYPICAL SWR CURVES

PROCOM









EFD 1/315 MHz-FME

End-Fed $\frac{1}{2}$ λ Dipole Antenna with Universal FME-Connection System

- Sturdy, conical, flexible rubber antenna.
- Full-size, end-fed ½ λ antenna whip.
- Highest quality materials designed for "wear and tear".

DESCRIPTION

- Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procom's line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, BFME-BNC and BFME-ETNC.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.
EFD 1/315 MHz-FME	140000450

ELECTRICAL		
MODEL	EFD 1/315 MHz-FME	
ANTENNA TYPE	½ λ antenna	
FREQUENCY	315 MHz	
IMPEDANCE	Nom. 50 Ω	
POLARIZATION	Vertical	
GAIN	0 dBd	
BANDWIDTH	≥ 30 MHz @ SWR ≤ 2.5	
SWR	< 1.3 @ f. res.	
MAX. POWER	25 W	
MECHANICAL		
MATERIALS	Steelwire moulded in thermoplastic rubber Black-chromed brass	
COLOUR	Black	
TOTAL HEIGHT	Approx. 430 mm	





WEIGHT	Approx. 80 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

RECOMMENDED BFME-CONNECTORS



(To be ordered separately)







EFD 70/...-FME

End-Fed $\frac{1}{2}$ λ Dipole Antenna with Universal FMEConnection System for Portable Equipment in the 70 cm Band

DESCRIPTION

- Sturdy, conical, flexible rubber antenna.
- Full-size, end-fed ½ λ antenna whip.

Description

- High gain and efficient decoupling from the portable equipment.
- 5 dB gain (typ.) compared to a $\frac{1}{4}\lambda$ antenna whip on the same equipment.
- Highest quality materials designed for "wear and tear".
- Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procoms line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, BFME-N, BFME-EBNC and BFME-ETNC.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.
EFD 70/FME	140000157
EFD 70/FME/GND	140000490

ELECTRICAL		
MODEL	EFD 70/FME	
ANTENNA TYPE	½ λ antenna for portable equipment	
FREQUENCY	70 cm band (380 – 470 MHz)	
IMPEDANCE	Nom. 50 Ω	
POLARIZATION	Vertical	
GAIN	5 dB (compared to a $\frac{1}{4}$ λ portable antenna)	
BANDWIDTH	≥ 30 MHz @ SWR ≤ 2.5	
SWR	< 1.3 @ f _c	
MAX. POWER	25 W	
MECHANICAL		
MATERIALS	Steelwire moulded in thermoplastic rubber	





	Black-chromed brass	
COLOUR	Black	
TOTAL HEIGHT	Approx. 310 mm (dep. on type)	
WEIGHT	Approx. 60 g	
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)	

PLEASE NOTE

The EFD 70/...-FME is also available in an antistatic protected version. The parts of the EFD 70/...-FME/GND (see ordering designations) are DC-grounded, and the connector shows a DC-short. The mechanical length is approx. 50 mm longer in this case.

RECOMMENDED BFME-CONNECTORS









HX 4/...-MTS2000

Helical Antenna for Portable Equipment in the 4 m Band

- Flexible, conical steel helix moulded in thermoplastic rubber.
- Significant reduction of length due to the helical principle.

DESCRIPTION

- Optimum performance compared to physical dimensions.
- Delivered factory tuned and tested to ensure minimum SWR.
- Provided with connector for Motorola MTS2000 series (GP900/GP1200/MTS2000).

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.	FREQUENCY
HX 4/I-MTS2000	140000257	66 - 76 MHz
HX 4/BOS-MTS2000	140000256	Tx 74 - 77 MHz / Rx 84 - 87 MHz
HX 4/m-MTS2000	140000301	72 - 82 MHz
HX 4/h-MTS2000	140000355	78 - 88 MHz

ELECTRICAL		
MODEL	HX 4/MTS2000	
ANTENNA TYPE	Shortened ¼ λ antenna for portable equipment	
FREQUENCY	Models within 66 - 88 MHz	
IMPEDANCE	Nom. 50 Ω	
POLARIZATION	Vertical	
BANDWIDTH	\geq 6 MHz at f _c @ SWR \leq 3.0	
SWR	< 2 when mounted directly on portable equipment	
MAX. POWER	50 W	
MECHANICAL		
MATERIALS	Steel helix moulded in thermoplastic rubber Black-chromed brass	
COLOUR	Black	



PROCOM



TOTAL HEIGHT	Approx. 260 mm (dep. on type)	
WEIGHT	Approx. 80 g	
CONNECTOR	SMA modified for Motorola MTS2000	







FLX 70/...-FME

Antenna with Universal FME-Connection System for portable Equipment in the 70 cm Band

- Flexible antenna made of steel wire covered with silicone tube.
- Full-size ¼ λ whip.

DESCRIPTION

- Highest quality materials.
- Delivered factory tuned and tested to ensure minimum SWR.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procoms line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC, BFME-N, BFME-MUHF, BFME-EBNC, BFME-ETNC and BFME-EMUHF.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.	FREQUENCY
FLX 70/s-FME	140000166	380 - 430 MHz
FLX 70/I-FME	140000170	400 - 450 MHz
FLX 70/h-FME	140000159	420 - 470 MHz

ELECTRICAL		
MODEL	FLX 70/FME	
ANTENNA TYPE	¼ λ antenna for portable equipment	
FREQUENCY	70 cm band covered by three models	
IMPEDANCE	Nom. 50 Ω	
POLARISATION	Vertical	
GAIN	0 dB (equal to a $\frac{1}{4}$ λ portable antenna)	
BANDWIDTH	≥ 50 MHz @ SWR ≤ 2.5	
SWR	< 2 when mounted directly on portable equipment	





MAX. POWER	200 W
MECHANICAL	
MATERIALS	Silicone tube over steel wire Weather- and shockproof plastics
COLOUR	Black
TOTAL HEIGHT	Approx. 200 mm (dep. on type)
WEIGHT	Approx. 25 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

The FLX 70 is also available with SMA male connector and different thread studs, but in this case with fixed, non-exchangeable connector (not FME-connection system). Information on these special versions on request.







FSP 2/...-GP 300

"StraightFlex" Antenna for Portable Equipment in the 2 m Band

- Highly flexible, polyethylene covered StraightFlex steel wire.
- Full size ¼ λ antenna whip.

DESCRIPTION

- Highest quality materials in an elegant and slender design.
 Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Especially designed for Motorola GP 300, GP 344, GP 360 and GP 388 (150 MHz band) etc

ORDERING DESIGNATIONS

ТҮРЕ	FREQUENCY	PRODUCT NO.
FSP 2/I-GP 300	144 - 164 MHz	140000107
FSP 2/h-GP 300	155 - 175 MHz	140000099

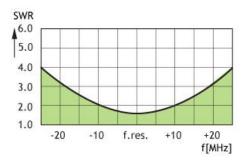
ELECTRICAL	
MODEL	FSP 2/GP 300
ANTENNA TYPE	$^{1\!/_{\!\!4}}$ λ antenna for portable equipment
FREQUENCY	2 m band covered by two models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB (equal to a ¼ λ portable antenna)
BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.5
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	100 W





MECHANICAL	
MATERIALS	Polyethylene covered flexible steel wire Weather- and shockproof plastics Cu-nite brass
COLOUR	Black
TOTAL HEIGHT	Approx. 480 mm (dep. on type)
WEIGHT	Approx. 35 g
CONNECTOR	1/4"-32 UNEF

TYPICAL SWR CURVE









FLX 900/...-FME

End-Fed 1/2 Dipole Antenna with Universal FME-Connection System for Portable Equipment in the 900 MHz band

- Flexible antenna made of steel wire covered with black silicone tubing.
- End-fed ½ λ whip groundplane independent.
 High gain and efficient decoupling from the portable equipment due to half-wave desian.
- 5 dB gain compared to a $\frac{1}{4}$ λ antenna whip on the same equipment.
- Highest quality materials in a long-lasting and durable design.
- Delivered factory tuned to customer specified frequency or cellular system.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
- Designed for use with the following of Procom's line of black FME-connectors (to be ordered separately): BFME-BNC, BFME-TNC, BFME-N, BFME-MUHF, BFME-EBNC, BFME-ETNC and BFME-EMUHF.

ТҮРЕ	PORDUCT NO.	FREQUENCY
FLX 900/FME	140000217	820 - 960 MHz

ELECTRICAL	
MODEL	FLX 900/FME
ANTENNA TYPE	End-fed ½ λ antenna for portable equipment
FREQUENCY	900 MHz band (820 - 960 MHz)
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dB (compared to a ¼ λ portable antenna)
BANDWIDTH	≥ 70 MHz @ SWR ≤ 2.0
SWR	< 1.3 @ f. res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Silicone tube over flexible steel wire Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 170 mm (dep. on type)
WEIGHT	Approx. 25 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

RECOMMENDED BFME-CONNECTORS



(To be ordered separately)

PLEASE NOTE

PROCOM

The FLX 900 is also available with SMA male connector, but in this case with fixed, non-exchangeable connector (not FME-connection system). Information on this special version on request.







HX 4/70...-FME

Helical Antenna with Universal FME-Connection System for Portable Equipment in the 4 m and 70 cm Bands

- Flexible, conical steel helix moulded in thermoplastic rubber.
- Significant reduction of length due to the helical principle.
 Optimum performance compared to physical dimensions.

- Delivered factory tuned and tested to ensure minimum SWR.
- Provided with universal FME-connection system for optimum flexibility and easily exchangeable connectors.
 Designed for use with the following of Procoms line of black FME-connectors (to be ordered separately): BFME-UHF, BFME-BNC, BFME-TNC and BFME-N.

TYPE	PRODUCT NO.
HX 4/70/FME	140000071

ELECTRICAL	
MODEL	HX 4/70/FME
ANTENNA TYPE	Shortened ¼ λ helical antenna for portable equipment
FREQUENCY	80 MHz band: freq. to be stated within: 6688 MHz 450 MHz band: freq. to be stated within: 380450 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
BANDWIDTH	80 MHz: ≥ 6 MHz @ SWR ≤ 3.0 450 MHz: ≥ 25 MHz @ SWR ≤ 3.0
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	50 W
MECHANICAL	
MATERIALS	Steel helix moulded in thermoplastic rubber Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	290 mm (dep. on type)





WEIGHT	Approx. 80 g
CONNECTOR	FME (female) (Exchangeable BFME-connectors to be ordered separately)

TYPICAL SWR CURVE RECOMMENDED BFME-CONNECTORS

(To be ordered separately)

PLEASE NOTE

The HX 4/70 is also available with different thread studs, but in this case with fixed, non-exchangeable connector (not FME-connection system). Information on these special versions on request.







HX 2/...-IC-F51

Helical Antenna for ICOM Portable Equipment in the 2 m band

- Flexible, conical steel helix moulded in flexible thermoplastic rubber.
- Reduced-size $\frac{1}{4}$ λ helical antenna whip.

- Optimum performance compared to physical dimensions.
- Delivered factory tuned and tested to ensure minimum SWR.
- Especially designed for ICOM IC-F51 (150 MHz band).

TYPE	PRODUCT NO.	FREQUENCY
HX 2/I-IC-F51	140000132	144 - 160 MHz
HX 2/m-IC-F51	140000133	152 - 168 MHz
HX 2/h-IC-F51	140000126	160 - 175 MHz

ELECTRICAL	
MODEL	HX 2/IC-F51
ANTENNA TYPE	Shortened ¼ λ helical antenna for portable equipment
FREQUENCY	2 m band covered by three models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	Approx3 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equipment)
BANDWIDTH	≥ 16 MHz @ SWR ≤ 3.0
SWR	< 1.5 when mounted directly on portable equipment
MAX. POWER	50 W
MECHANICAL	
MATERIALS	Steel helix moulded in flexible thermoplastic rubber Weather- and shockproof plastics Black-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 150 mm (dep. on type)
WEIGHT	Approx. 30 g
CONNECTOR	SMA (male) special for IC-F51



TYPICAL SWR CURVES



FLX-W 70/...-SMA-STP8038

Flexible Antenna for ICOM Portable Equipment in the 70 cm Band

- Flexible antenna made of RG 178 wire covered with shrink tube.
- Full-size ¼ λ whip.

DESCRIPTION

PROCOM

- Highest quality materials.
 Delivered factory tuned and tested to ensure minimum SWR.
 Especially designed for Sepura Radio STP8038 (450 MHz band).

ORDERING DESIGNATIONS

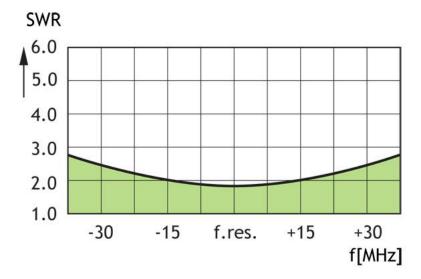
ТҮРЕ	FREQUENCY	PRODUCT NO.
FLX-W 70/405-SMA-STP8038	380 - 430 MHz	140000586
FLX-W 70/387.5-SMA-STP8038	362.5 - 412 MHz	140000600
FLX-W 70/395-SMA-STP8038	370 - 420 MHz	140000601

ELECTRICAL		
MODEL	FLX-W 70/SMA-STP8038	
ANTENNA TYPE	½ λ antenna for portable equipment	
FREQUENCY	70 cm band covered by three models	
IMPEDANCE	Nom. 50 Ω	
POLARIZATION	Vertical	
GAIN	0 dB (equal to a ¼ λ portable antenna)	
BANDWIDTH	≥ 50 MHz @ SWR ≤ 2.0	
SWR	< 2 when mounted directly on portable equipment	
MAX. POWER	25 W	
MECHANICAL		
MATERIALS	Shrink tube over RG 178 wire 50 Ω	
COLOUR	Black	
TOTAL HEIGHT	Approx. 170 mm / 6.69 in. (dep. on type)	
WEIGHT	Approx. 5.5 g / 0.01 lb.	
CONNECTOR	SMA (male) special for Sepura STP8038	





TYPICAL SWR CURVE





FLX-P 450/336 MHz-P-SMA

Flexible Antenna for Portable Equipment in the 70 cm Band

DESCRIPTION

- Flexible antenna made of piano wire covered with shrink tube. Full-size $^1\!\!/_4$ λ whip.

- Highest quality materials.Delivered factory tuned and tested to ensure minimum SWR.

ORDERING DESIGNATIONS

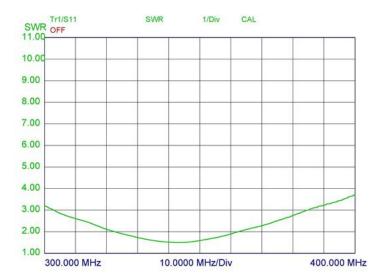
ТҮРЕ	FREQUENCY	PRODUCT NO.
FLX-P 450/336 MHz-P-SMA	336 - 339 MHz	140000625 (MOQ 500)

SPECIFICATIONS

ELECTRICAL	
MODEL	FLX-P 450/336 MHz-P-SMA
ANTENNA TYPE	1/4 λ antenna for portable equipment
FREQUENCY	70 cm band / 336 - 339 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB (equal to a ¼ λ portable antenna)
BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.0
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Shrink tube over piano wire
COLOUR	Black
TOTAL HEIGHT	Approx. 217mm / 8.54 in.
WEIGHT	Approx. 5.5 g / 0.02 lb.
CONNECTOR	SMA (male)

TYPICAL SWR CURVE











GA 30-88-MU5

Short Rubber Antenna with Matching Unit for the 30 - 88 MHz Range

• Small sturdy rubber antenna for short-range communication.

DESCRIPTION

- Specially designed for portable two-way radio equipment.
 Highest quality materials ensure many years of trouble-free service, in tough environments.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
GA 30-88-MU5	140000047

SPECIFICATIONS for whip inclusive of matching unit

ELECTRICAL		
MODEL	GA 30-88-MU5	
ANTENNA TYPE	Short broad-band antenna for portable equipment	
FREQUENCY	30 - 88 MHz	
IMPEDANCE	Nom. 50 Ω	
POLARIZATION	Vertical	
SWR	≤ 10.0	
MAX. POWER	5 W	
MECHANICAL		
MATERIALS	Whip: Steelwire moulded in thermoplastic rubber Matching unit: Housing: Polypropylene TNC connector: Cu-nite plated brass	





COLOUR	Black	
DIMENSIONS	Approx. ø22 x 230 mm	
WEIGHT	Approx. 80 g	
CONNECTOR	TNC (male)	







EFD-TETRA-1000-N-5mRG58

End-Fed ¼ λ Dipole Antenna for TETRA Band

- Flexible $\frac{1}{2}$ λ TETRA-antenna (410 430 MHz).
- The end-fed dipole principle makes the antenna independent of ground-plane.

DESCRIPTION

- The radiating part of the antenna is placed on top of a glassfibre tube with shock spring approx. 660 mm above the mounting area.
- The large distance to the mounting area results in an almost perfect radiation, completely independent of the mounting area.

 • Permanently attached 5m cable with FME(female) connector.
- Wide range of FME-accessories available.

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.
EFD-TETRA-1000-N-5mRG58	140000580

ELECTRICAL		
MODEL	EFD-TETRA-1000-N-5mRG58	
ANTENNA TYPE	½ λ antenna	
FREQUENCY	410 - 430 MHz	
IMPEDANCE	Nom. 50 Ω	
POLARISATION	Vertical	
GAIN	0 dBd	
BANDWIDTH	20 MHz	
SWR	< 2.0	
MAX. POWER	25 W	
MECHANICAL		
MOUNTING	14 mm / 0.55 in. dia. hole	
MOUNTING THICKN.	0.7 → 4.5 mm / 0.028 → 0.18 in.	
MATERIALS	Black-chromed brass Weather- and shockproof plastics Polyethylene covered flexible steel wire	





	Cu-nite brass, seawater resistant Spring: Black chromed stainless steel	
COLOUR	Black	
TEMP. RANGE	-50° C → +70° C	
CONNECTOR	5 m RG 58 permanently attached cable with FME (female)	
RECOMMENDED INSTALL. TORQUE	8.5 ± 1 Nm	
HEIGHT	1000 mm	
OUTER HEIGHT (Mount)	16 mm / 0.63 in.	
WIDTH/LENGTH (Mount)	ø55 mm / ø2.17 in.	
WEIGHT	Approx. 500 g	

FME-SYSTEM ACCESSORIES

FME-CABLES		
ТҮРЕ	PRODUCT NO.	
1 m FME	130000437	
2 m FME	130000447	
3 m FME	130000457	
4 m FME	130000466	
5 m FME	130000474	
6 m FME	130000483	
4 m FME-white	110000064	
6 m FME-white	110000066	
12 m FME-white	110000068	
18 m FME-white	110000069	
FME-CONNECTORS		
ТҮРЕ	PRODUCT NO.	
FME-FME	130000583	
FME-P (Prolongation)	130000565	
FME-N	130000571	
FME-FSMA (Female-SMA)	130000578	
FME-BNC	130000566	
FME-TNC	130000569	
FME-UHF	130000572	
FME-MUHF (Mini-UHF)	130000573	





FME-EMUHF (Elbow-MUHF)	130000582
FME-EBNC (Elbow-BNC)	130000580
FME-ETNC (Elbow-TNC)	130000581
FME-SMA	130000577

For further information about other types of FME-cables and FME-connectors, please compare the cable and connector data sheets under accessories.



MOUNTING

The gasket should be entirely supported by the mounting plane. Do not use sealer on rubber gasket or other places.





BA 450/GPS

Covert Body Antenna for TETRA Band

- Highly flexible covert coax antenna with silica fibre sleeving.
- Reduced $\frac{1}{2}$ λ skirt dipole antenna.

DESCRIPTION

- Covert flexible body antenna, supporting free movement.
- Highest quality materials in an elegant design.
- Also useable for GPS reception.

ORDERING DESIGNATIONS

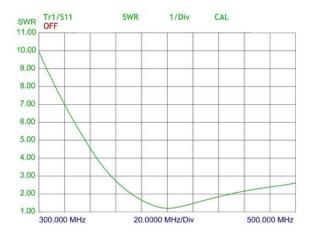
TYPE	PRODUCT NO.
BA 450/GPS/380-430	140000608
BA 450/GPS/425-475	140000613
BA 450/GPS/440-490	140000607

BA 450/GPS	
½ λ antenna	
380 - 470 MHz covered by three models	
Nom. 50 Ω	
Vertical	
0 dBi (-5dBi mounted on the body)	
≤ 50 MHz	
< 2.5 (Typ. < 2.0) When mounted in coat collar	
25 W	
Coax cable with silica fibre sleeving	
Black	
550 mm	
Approx. 18 g	

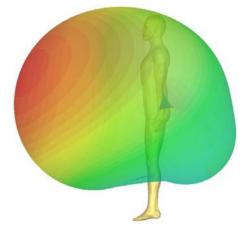




CONNECTOR	SMA (male)
MOUNTING	Attached to clothing with one safety pins



3D GAIN PLOT *



^{*} When antenna is mounted in front of chest.

MOUNTED ON THE BODY











FLX-P 450/336 MHz-P-TNC

Flexible Antenna for Portable Equipment in the 70 cm Band

DESCRIPTION

- Flexible antenna made of piano wire covered with shrink tube.

- Full-size ¼ λ whip.
 Highest quality materials.
 Delivered factory turned and tested to ensure minimum SWR.

ORDERING DESIGNATIONS

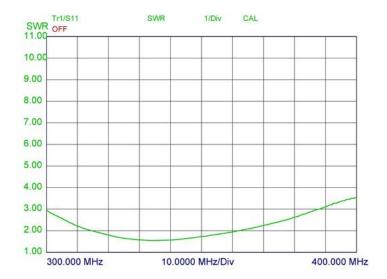
ТҮРЕ	FREQUENCY	PRODUCT NO.
FLX-P 450/336 MHz-P-TNC	336 - 339 MHz	140000624 (MOQ 500)

ELECTRICAL	
MODEL	FLX-P 450/336 MHz-P-TNC
ANTENNA TYPE	¼ λ antenna for portable equipment
FREQUENCY	70 cm band / 336-339 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical





GAIN	0 dB (equal to a $\frac{1}{4}$ λ portable antenna)
BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.0
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Shrink tube over piano wire
COLOUR	Black
TOTAL HEIGHT	Approx. 228 mm / 8.98 in.
WEIGHT	Approx. 6 g / 0.01 lb.
CONNECTOR	TNC (male)









HX 70/...-SMA-STP8038

Helical Antenna for Portable Sepura Equipment in the TETRA Bands

- Short conical steel helix moulded in flexible thermoplastic rubber.
- Reduced-size ¼ λ helical antenna whip.

DESCRIPTION

- Optimum performance compared to physical dimensions.
- Delivered factory tuned and tested to ensure minimum SWR.
- Especially designed for Sepura STP 8038.

ORDERING DESIGNATIONS

TYPE NO.	FREQUENCY	PRODUCT NO.
HX 70/385-SMA-STP8038	370 - 400 MHz	140000581

ELECTRICAL	
MODEL	HX 70/SMA-STP8038
ANTENNA TYPE	Shortened ¼ λ helical antenna for portable equipment
FREQUENCY	370 - 400 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	Approx3 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equipment)
BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.0
MAX. POWER	50 W
MECHANICAL	
MATERIALS	Steel helix moulded in flexible thermoplastic rubber Weather- and shockproof plastics Cu-nite brass
COLOUR	Black
TOTAL HEIGHT	Approx. 60 mm (dep. on type)
WEIGHT	Approx. 20 g
CONNECTOR	SMA male







SB 30-88-MU1

Foldable 1 m Steel-Band Antenna with Matching Unit for the 30 - 88 MHz

- Rugged, flexible and foldable steel-band whip antenna.
- Provided with "goose neck" section to arbitrary positioning of the whip.

DESCRIPTION

- Specially designed for portable two-way radio equipment.
 Highest quality materials ensure many years of trouble-free service.
- Totally designed for tolerating tough environments.
 Matching unit ensures that the antenna can cover the whole 30 - 88 MHz range.
- Matching unit provided with TNC connector.

ORDERING DESIGNATIONS

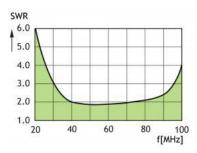
TYPE	PRODUCT NO.
SB 30-88-MU1	140000343

ELECTRICAL	
MODEL	SB 30-88-MU1
ANTENNA TYPE	$^{1\!/_{\!\!4}}$ λ shortened broad-band antenna for portable equipment
FREQUENCY	30 - 88 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
BANDWIDTH	≥ 58 MHz @ SWR ≤ 3.0
SWR	≤ 3.0
MAX. POWER	5 W
MECHANICAL	
MATERIALS	Whip: Stainless steel band covered by weather- and shockproof plastics Matching unit: Housing: Polypropylene TNC connector: Cu-nite plated brass





COLOUR	Black
TOTAL HEIGHT	Approx. ø22 x 1000 mm
WEIGHT	Approx. 200 g
CONNECTOR	TNC (male)









SS 70 1/4-TNC

End-Fed $\frac{1}{4}$ λ Monopole Antenna with TNC-Connection System for Portable Equipment in the 420 - 450 MHz Band

- Designed for professional use.
- Full-size ¼ λ whip.
 Highest quality materials in an elegant design.

DESCRIPTION

- Delivered factory-tuned and -tested to ensure minimum SWR and optimum performance.
- TNC (male).

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.
SS 70 1/4-TNC	140000360

ELECTRICAL	
MODEL	SS 70 1/4-TNC
ANTENNA TYPE	¼ λ antenna for portable equipment etc.
FREQUENCY	420 - 450 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB (compared to a $\frac{1}{4}$ λ portable antenna)
BANDWIDTH	≥ 30 MHz @ SWR ≤ 2.0
SWR	< 1.3 @ f. res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Stainless steel Black-chromed brass







COLOUR	Black
TOTAL HEIGHT	Approx. 173 mm
WEIGHT	Approx. 35 g
CONNECTOR	TNC (male)







FSP 2/...-M-DP3601

"StraightFlex" Antenna for Portable Equipment in the 2 m Band

- Highly flexible, polyethylene covered StraightFlex steel wire.
- Full size ¼ λ antenna whip.

DESCRIPTION

- Highest quality materials in an elegant and slender design.
 Delivered factory tuned and tested to ensure minimum SWR and optimum performance.
- Especially designed for Motorola M-DP3601 (150 MHz band).

ORDERING DESIGNATION

ТҮРЕ	FREQUENCY	PRODUCT NO.
FSP 2/h-M-DP3601	155 - 175 MHz	140000519

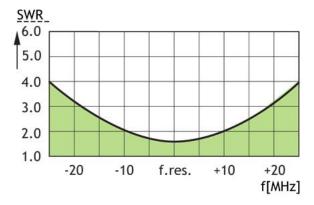
ELECTRICAL	
MODEL	FSP 2/h-M-DP3601
ANTENNA TYPE	¼ λ antenna for portable equipment
FREQUENCY	2 m band covered by two models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB (equal to a $\frac{1}{4}$ λ portable antenna)
BANDWIDTH	≥ 20 MHz @ SWR ≤ 2.5
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	100 W
MECHANICAL	
MATERIALS	Polyethylene covered flexible steel wire





	Weather- and shockproof plastics Cu-nite brass
COLOUR	Black
TOTAL HEIGHT	Approx. 500 mm
WEIGHT	Approx. 35 g
CONNECTOR	Connector for DP3601 (Motorola)

TYPICAL RESPONSE CURVE









FSP 70 1/4/TETRA-TPH700

"StraightFlex" Antenna with Connector for Portable Equipment for the TETRA-Band

- Highly flexible, polyethylene covered with StraightFlex steel wire.
- Full-size ¼ λ whip.

DESCRIPTION

- Highest quality materials in an elegant design.
- Delivered factory tuned and tested to ensure minimum SWR.
 Provided with special connector for Siemens TPH700

ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	FREQUENCY
FSP 70 1/4/TETRA-TPH700	140000436	380 - 430 MHz

ELECTRICAL	
MODEL	FSP 70 1/4/TETRA-TPH700
ANTENNA TYPE	¼ λ antenna for portable equipment
FREQUENCY	70 cm band covered by three models
IMPEDANCE	Nom. 50 Ω
POLARISATION	Vertical
GAIN	0 dB (compared to a $\frac{1}{4}$ λ portable antenna on the same equipment)
BANDWIDTH	≥ 50 MHz @ SWR ≤ 2.0
SWR	< 2 when mounted directly on portable equipment
MAX. POWER	100 W
MECHANICAL	
MATERIALS	Polyethylene covered flexible steel wireBlack-chromed brass
COLOUR	Black
TOTAL HEIGHT	Approx. 170 mm (dep. on type)
WEIGHT	Approx. 24 g
CONNECTOR	Connector for TPH700 (Siemens)





TYPICAL RESPONSE SWR CURVE

