HIGH PERFORMANCE ANTENNAS FOR INBUILDING APPLICATIONS SMALL CELL, DAS & PUBLIC SAFETY

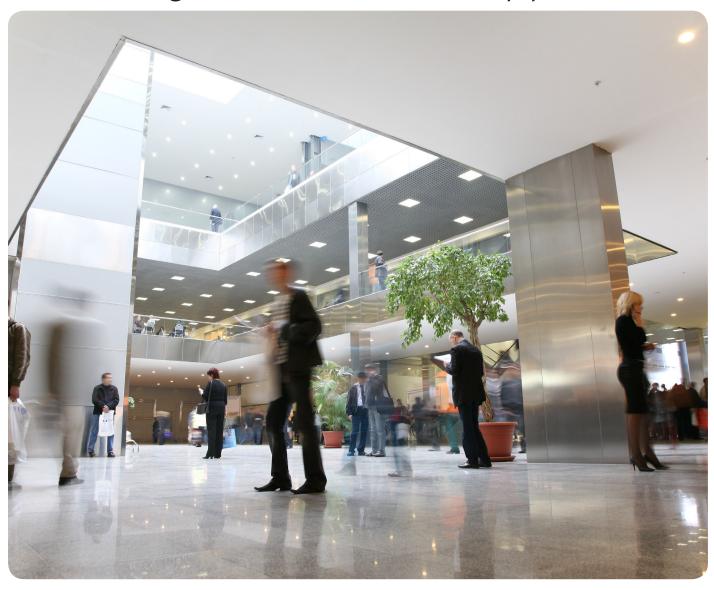


CONNECTING PEOPLE + TECHNOLOGY





Performance-Driven Technology for InBuilding Small Cell & DAS Applications



ONE SOURCE. GLOBAL SITE SOLUTIONS™

Amphenol is a leading global solutions provider for wireless infrastructure systems. Whether it's a complex base station, a small DAS network or an InBuilding System, we supply over 6,000 products with best-in-class performance.

With Amphenol, OEMs and operators have the convenience of a one-stop shop, not only for quality antennas, but for transmission line products like feeder cable, hybrid fiber, surge arrestors and connectors as well as RF peripherals like TMAs, combiners, couplers and splitters. And, all products support next generation wireless communication systems.

Amphenol offers years of expertise in product design, development and engineering along with an unparalleled commitment to customer service.





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InBuilding Site Solutions

Amphenol is a single source for wireless infrastructure offering not only antennas for Small Cell and Distributed Antenna Systems, but also Passive Components like couplers, power splitters and attenuators.

A wide selection of antennas gives you the coverage you need for your inbuilding network and the passive components complete the system.

Jumpers



Designed for indoor applications with high flexibility and small bending diameters. Available in a variety of cable lengths and connector combinations.

Ceiling Mount Antennas



Unobstrusive, ceiling-mount omnidirectional antennas. Dual band and multi band, SISO and MIMO options. Great for indoor and public safety applications.

Tappers



An alternative to couplers, tappers sample the signal from the main feeder cable for different floors of a building. Available in 6, 7, 8, 10 and 15 dB values. 7/16-DIN and N-Type options.

MicroCell Panel Antennas



SISO and MIMO, wall-mounted panels for indoor and public safety applications. Ideal for coverage in hallways.

Power Splitters



Evenly split high power cellular signals with minimal reflections and loss. Available in 2-way, 3-way and 4-way configurations at 698-2700 MHz. 7/16-DIN Female connectors.

Omni-Directional Antennas



Small omni-directional antennas for inbuilding applications.

Attenuators



High power, low intermodulation attenuators maintain specified attenuation over a wide band 698-2700 operating range. Available with 7/16-DIN and N-Type connectors.

Directional Coupers



The multi-section design provides flat coupling over the 698-2700 MHz operating band. Available in 3, 6, 10, 13, 15, 20 and 30 dB values. 7/16-DIN and N-Type options.

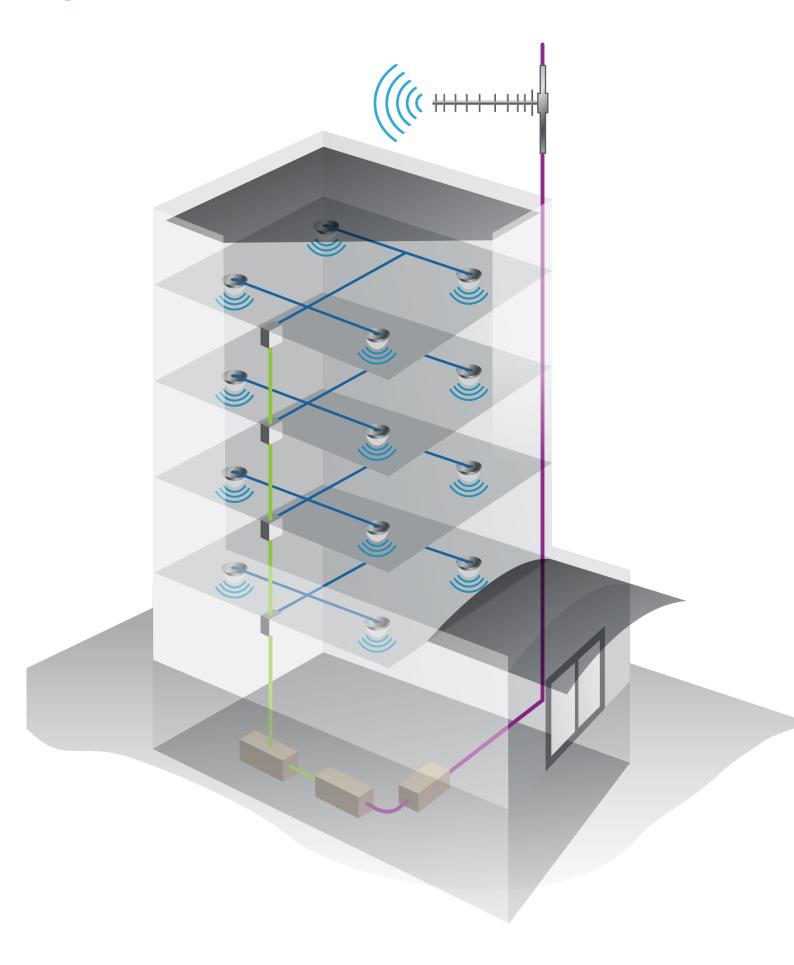
Termination Loads

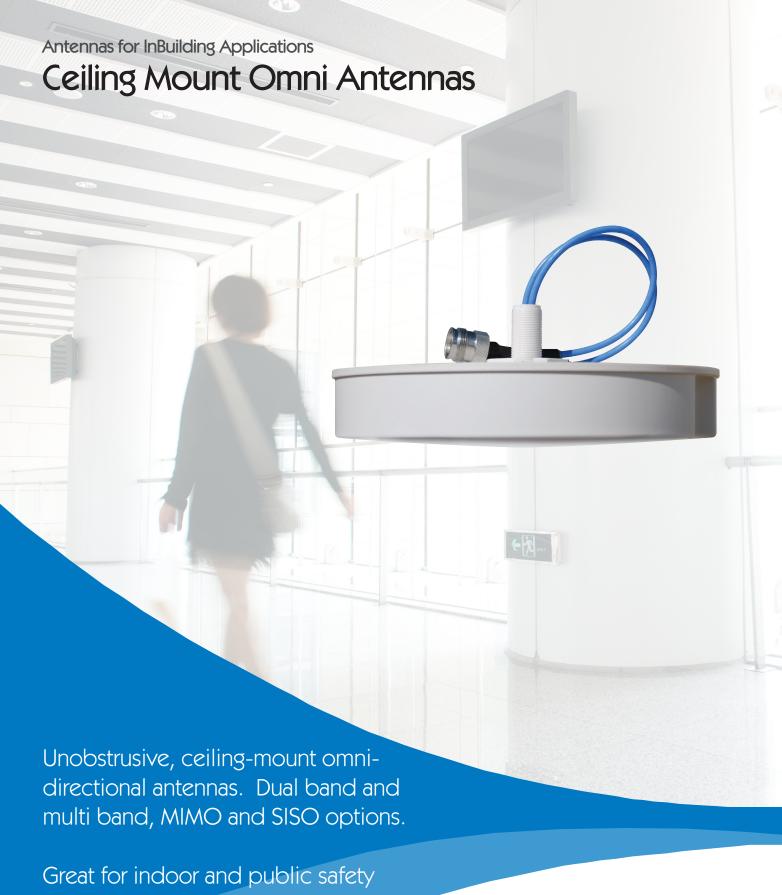


Terminate unwanted ports of hybrid couplers used as in-band combiners. Operates 698-2700 MHz and available in 50W, 100W and 200W. 7/16-DIN and N-Type options.









applications.









Model Number			500!	5200		500	5300	
Description				ount Omni, VHPOL, 360°, 00 MHz, 1.5 3.0 dBi			ount Omni, VHF 0 MHz, 3.5 5.0	
Features		 Designed fo 	 Indoor, MIMO omni antenna Designed for ceiling mount installation Available with N-Type, 4.1/9.5 or 7/16-DIN connector 			10 omni antenn or ceiling mount ith N-Type, 4.1/ onnector	installation	
lmage		MIMO MIMO						
		Options		Model Number	Options		Model	Number
		Antenna with I	N-Type Connec	tor 5005200	Antenna with	N-Type Connec	tor 50053	00
Ordering Designat	ion	Antenna with	4.1/9.5 Connect	tor 5005200-mDIN	Antenna with	4.1/9.5 Connec	tor 50053	00-mDIN
		Antenna with	7/16-DIN Conne	ector 5005200-DIN	Antenna with	4.3/10 Connect	or 50053	00-4310
					Antenna with 7/16-DIN Connector 5005300-DIN			00-DIN
Electrical Characte	eristics							
5 (441)		Port 1: 698	-2700 MHz	Port 2: 1710-2700 MHz	Port 1: 698-960	1710-2700 MHz	Port 2: 698-960	1710-2700 MHz
Frequency (MHz)		698-960	1710-2700	1710-2700	698-960	1710-2700	698-960	1710-2700
Impedance			50	ΩΩ	50Ω			
Polarization		Ver	tical	Horizontal	Vertical & Horizontal Vertical & Horizontal			
Gain		1.5 dBi	1.5 dBi	3.0 dBi	3.5 dBi	5.0 dBi	3.5 dBi	5.0 dBi
Half Power Beamw	idth - Horizontal	100-120°	30-65°	360°	36	0°	36	0°
Half Power Beamw	idth - Vertical				80-	100°	80-	100°
VSWR		< 1.8:1	< 1.8:1	< 1.5:1	< 2.0:1	< 1.8:1	< 2.0:1	< 1.8:1
Isolation			-23 dB typic	al (inter-port)		-20 dB typic	al (inter-port)	
Max. Power			50	W		50	W	
Intermodulation		IM value for N		dBc licable at date of manufacture	IM value for N		dBc licable at date c	f manufacture
Mechanical Charac	teristics							
Connector		(2x) I		or 7/16-DIN Female rated cable	(2x) N-Ty		8/10 or 7/16-DIN rated cable	I Female
Operating Tempera	ature		-30° to +70° C (-22° to +158° F)		-30° to +70° C	-22° to +158° F)
Colour			Wh	nite		W	nite	
	Radome		LSZH UV S	Stable ABS		LSZH UV S	Stable ABS	
Materials	Chassis		-					
Dimensions			130 x Ø206 mm	n (5.1 x Ø8.1 in)		35 x Ø210 mm	n (1.4 x Ø8.3 in)	
Weight				(1.3 lbs)		0.9 kg	(2.0 lbs)	
Mounting				t - single point				
9			,gg	3 F	Ceiling mount - single point			





iDAS

Model Number			5005300A			5005400			
Description			2-Port, Ceiling M '00 698-2700 M				2-Port, Ceiling M 8-960 1710-6000		
Features		 Designed for 	 Indoor, MIMO omni antenna Designed for ceiling mount installation Available with N-Type, 4.1/9.5, 4.3/10 or 7/16-DIN connector Indoor, MIMO omni antenna Designed for ceiling mount installation Available with N-Type, 4.1/9.5, 4.3/10 or 7/16-DIN connector 			installation			
lmage		HITHO	T			MINO	KNIN ^O		
		Options		Mode	l Number	Options		Mode	l Number
		Antenna with	N-Type Connec	tor 50053	00A	Antenna with	N-Type Connect	or 50054	.00
Ordering Designa	tion	Antenna with	4.1/9.5 Connect	tor 50053	00A-mDIN	Antenna with	4.1/9.5 Connect	or 50054	00-mDIN
		Antenna with	4.3/10 Connecto	or 50053	00A-4310	Antenna with 4.3/10 Connector 50		or 50054	00-4310
		Antenna with	7/16-DIN Conne	ector 50053	00A-DIN	Antenna with	7/16-DIN Conne	ctor 50054	00-DIN
Electrical Charact	eristics								
Frequency (MHz)	raguanay (MHz)		Port 1: 698-2700 MHz		0-2700 MHz	Port 1: 698	8-6000 MHz	Port 2: 69	8-960 MHz
r requericy (IVII 12)		698-960	1710-2700	698-960	1710-2700	698-960 1710-6000 698-960 171		1710-6000	
Impedance			50	Ω			50	50Ω	
Polarization		Lir	ear	Lir	iear	Ver	tical	Ver	tical
Gain		3.5 dBi	5.0 dBi	3.5 dBi	5.0 dBi	4.0	dBi	4.0	dBi
Half Power Beamv	vidth - Horizontal	30	60°	30	60°	36	60°	30	60°
Half Power Beamv	vidth - Vertical	90°	30-65°	90°	30-65°	5	0°	5	0°
VSWR		< 2	.0:1	< 2	2.0:1	< 1.5:1	< 2.0:1	< 1.5:1	< 2.0:1
Isolation		≥ 18.5 dB (average)	≥ 22 dB	≥ 18.5 dB (average)	≥ 22 dB		> -10 dB typic	cal (inter-port)	
Max. Power			100) W			50	W	
Intermodulation		IM value for I	-150 N-Type only app	dBc licable at date o	of manufacture	IM value for N	-153 N-Type only appl		of manufacture
Mechanical Chara	cteristics								
Connector		(2x) N-T	ype, 4.1/9.5, 4.3 on 1m plenui	3/10 or 7/16-DIN m rated cable	N Female	(2x) N-Ty	ype, 4.1/9.5, 4.3	/10 or 7/16-DIN	N Female
Operating Tempe	rature		-55° to +60° C (-67° to +140° F	·)		-30° to +70° C (-	·22° to +158° F	=)
Colour			Wł	nite			Wh	ite	
	Radome		Al	BS			LSZH UV S	table ABS	
Materials	Chassis		_					-	
Dimensions			40 x Ø218 mm	ı (1.6 x Ø8.6 in)			120 x Ø240 mm	n (4.7 x Ø9.4 in)
Weight			0.5 kg ((1.5 lbs)			1.5 kg (3.3 lbs)	
Mounting			Ceiling mount	t - single point			Ceiling moun	t - dual point	
riounting			Ceiling mount - single point			Ceiling mount - dual point			





Model Number		5052	400	5052450		
Description		2-Band, 1-Port, Ceiling Mc 695-960 1710-6000		2-Band, 1-Port, Ceiling Mount Omni, VPOL 695-960 1710-2700 MHz, 2.5 4.5 dE		
Features		 Indoor, omni antenna Designed for ceiling mount in Multi band performance Available with N-Type, 4.1/9.5 		 Indoor, multi band, omni antenna Designed for ceiling mount installation Available with N-Type, 4.1/9.5, 4.3/10 or 7/16-DIN connector 		
lmage		Sign		350		
		Options	Model Number	Options	Model Number	
		Antenna with N-Type Connecto	or 5052400	Antenna with N-Type Connec	tor 5052450	
Ordering Designation		Antenna with 4.1/9.5 Connecto	or 5052400-mDIN	Antenna with 4.1/9.5 Connect	tor 5052450-mDIN	
		Antenna with 7/16-DIN Connec	ctor 5052400-DIN	Antenna with 4.3/10 Connector	or 5052450-4310	
				Antenna with 7/16-DIN Connector 5052450-DIN		
Electrical Charac	cteristics					
Frequency (MHz)	695-960 MHz	1710-6000 MHz	695-960 MHz 1710-2700 MH:		
Polarization		Vertio	cal	Vertical		
Gain		2.1 dBi	5.0 dBi	2.5 ± 0.5 dBi	4.5 ± 0.5 dBi	
Half Power Bean	nwidth - Horizontal	360°	360°	360°	360°	
Half Power Bean	nwidth - Vertical	60°	60°			
VSWR		< 2.5:1 (Fu < 1.8:1 (806-960 &		< 1.8:1	< 1.5:1	
Max. Power		50 V	N	50	W	
Intermodulation		-153 c IM value for N-Type only applic			dBc licable at date of manufacture	
Mechanical Char	racteristics					
Connector		(1x) N-Type, 4.1/9.5 o +0.3m (11.8 in) RG			1/10 or 7/16-DIN Female rated cable	
Colour		Whit	te	Wł	nite	
	Radome	UV Stabl	le ABS	LSZH UV S	Stable ABS	
Materials	Chassis	Alumir	nium	-		
Dimensions		250 x 117 mm	(9.8 x 4.6 in)	115 x Ø203 mn	n (4.5 x Ø8.0 in)	
Weight		0.35 kg (0	0.8 lbs)	0.4 kg	(0.9 lbs)	
Mounting		Included: screws (3 holes in Optional: Mounting b		0.4 kg (0.9 lbs) Ceiling mount - single point		





Model Number		5087000		5086000					
Description		2-Band, 1-Port, Ceiling Mount Omni, HPOL, 360°, 698-960 1427-3600 MHz, 3.2-6.3 dBi				, Ceiling Mount Or 1427-2700 MHz,			
Features		Designed for ceiling mount installation		Indoor, omni anteDesigned for ceileMulti band perfor	ng mount installation	on			
Image		350		-	-		sys ^O		
Ordering Designation	air - Designation		Options		Model Number		Options		Model Number
Ordering Designation	OH.	Antenna w	ith 4.3/10 Co	onnector	5087000		Antenna with 4.3/10 Connector 5086000		5086000
Electrical Character	ristics								
Frequency (MHz)		698-793	803-881	890-1511	1710-2690	3400-3600	380-450	698-960	1710-2690
Impedance				50Ω				50Ω	
Polarization		Horizontal				Horizontal			
Gain		3.91 dBi	3.26 dBi	3.28 dBi	4.85 dBi	6.30 dBi	2.12 dBi	2.42 dBi	4.18 dBi
Half Power Beamwig	dth - Horizontal		,	360°		<u> </u>		360°	
VSWR		1.6	1.6	1.6	1.6	1.9	1.77	1.64	1.55
Max. Power				50 W				50 W	
Intermodulation		< -14	0 dBc		< -150 dBc			< -140 dBc	
Mechanical Charact	teristics								
Connector			(1)	k) 4.3/10 Fen	nale			(1x) 4.3/10 Femal	e
Colour				White				White	
	Radome			ABS			ABS		
Materials	Radiating Element	РСВ			PCB				
Dimensions			9 x Ø13	35 mm (0.4 x	Ø5.3 in)		18 x	Ø265 mm (0.7 x Ø	10.4 in)
Weight			C).17 kg (0.4 ll	os)			0.49 kg (1.1 lbs)	
RoHS				Yes				Yes	





iDAS / Public Safety

Model Number		5056	5056000		380-6000	
Description		1-Band, 1-Port, Ceiling M 330-6000 MH:			ount Omni, Linear-Pol, 360°, MHz, 0 dBi	
Features		Indoor, omni antenna Designed for ceiling mount in Utlra-broad, multi band perfo		Ultra wideband, vertically polarized, omni antenna Low profile DAS indoor antenna for the 380-6000 MHz band Capable of supporting TETRA, GSM, DCS, PCS, UMTS, WiFi 2.4 and 5.6 GHz, 4G LTE and WiMax Provide with external coaxial cable with N-female connector No need for external ground plane Two installation options		
lmage		s _s s _o		esto Company		
		Options	Model Number	Options	Model Number	
01: 0:		Antenna with N-Type Connecte	or 5056000	Antenna with N-Type Connec	tor UWB-I-380-6000	
Ordering Design	ation	Antenna with 4.1/9.5 Connector	or 5056000-mDIN			
		Antenna with 7/16-DIN Conne	ctor 5056000-DIN	,		
Electrical Charac	teristics					
Frequency		330-960 MHz	1710-6000 MHz	380-6000 MHz		
Impedance		50	Ω	50Ω		
Polarization		Verti	ical	Linear (Vertically Polarized)		
Gain		2.1 dBi	5.0 dBi at 1710-2170 MHz 5.0 dBi at 2400-6000 MHz	0 dBi		
Half Power Beam	width - Horizontal	360°	360°	3	60°	
Half Power Beam	width - Vertical	60°	60°			
				Tetra: 380-470 MHz	≤ 2	
				4G LTE: 698-960 & 25	00-2700 MHz ≤ 2	
VSWR		330-350 MHz:		GSM: 880-960 & 17	10-1880 MHz ≤ 2	
73771		350-6000 MHz:	< 2.0:1	UMTS: 1910-2200 M	Hz ≤ 2	
				WiFi: 2400-2500 M	Hz ≤ 2	
				WiMax: 5000-6000 M	Hz ≤ 2	
Max. Power		50	W	50	0 W	
Intermodulation		-150 IM value for N-Type only appli		< -140 dBc (3rd	Order, 2x43 dBm)	
Mechanical Char	acteristics					
Connector		(1x) N-Type, 4.1/9.5 or 7/1	6-DIN on base of antenna	1 Connector, N-Type Female	e on 400 mm of RG400 Cable	
Operating Temp	erature			-30° to +70° C	(-22° to +158° F)	
Colour		Wh	ite	White F	RAL 9003	
M	Radome		-	UL 94 HB recognized	Flame Retardant Lexan	
Materials	Chassis		-	Alun	ninium	
Dimensions	,	334 x 232 mm	(13.1 x 9.1 in)	146 x 107 x 325 mr	m (5.7 x 4.2 x 12.8 in)	
Weight		0.5 kg (1.1 lbs)	0.65 kg	y (1.4 lbs)	
				0.65 kg (1.4 lbs) Ceiling Mount (two options)		





Model Number 52113		8	5211421			
Description		1-Band, 1-Port, Ceiling Moun 380-395 MHz, 2			Mount Omni, VPOL, 360°, 1Hz, 2.1 dBi	
Features		Designed for ceiling mount installation		 Indoor, omni antenna Single band, vertically pola Designed for ceiling mount For use in Public Safety sys 	installation	
lmage		sico .		950		
		Options	Model Number	Options	Model Number	
Ordering Designa	ation	Antenna with N-Type Connector	5211388	Antenna with N-Type Connec	ctor 5211421	
Electrical Charac	teristics					
Frequency		380-395 MHz		410-430 MHz		
Impedance		50Ω		50Ω		
Polarization		Vertical		Vertical		
Gain		2.1 dBi		2.1 dBi		
Half Power Beam	width - Horizontal	360°		3	60°	
Half Power Beam	width - Vertical	80°		3	30°	
VSWR		< 2.1		<	2.1	
Max. Power		30 W		30) W	
Intermodulation		-143 dBc IM value for N-Type only applicab			3 dBc olicable at date of manufacture	
Mechanical Char	acteristics					
Connector		(1x) N-Type Fe +0.5m (19.7 in) RG58			pe Female RG58 Cable, Rear	
Colour		White		W	hite	
	Radome	ABS		Α	BS	
Materials	Chassis	Aluminum	1	Alun	ninum	
Dimensions	'	70 x Ø202 mm (2.8	x Ø8.0 in)	70 x Ø202 mn	n (2.8 x Ø8.0 in)	
Weight		0.47 kg (1.0	lbs)	0.47 kg	(1.0 lbs)	
Mounting		Mount with three (3) screws and the antenna. Three (3) white caps screws after insta	wall plugs supplied with are supplied to hide the	0.47 kg (1.0 lbs) Mount with three (3) screws and wall plugs supplied with the antenna. Three (3) white caps are supplied to hide the screws after installation.		





Model Number		5211460		MA100PQ01		
Description		1-Band, 1-Port, Ceiling Mount (450-470 MHz, 2.1		1-Band, 0-Port, Ceiling Mount C 380430 MHz, 2.1		
Features		 Indoor, omni antenna for TETRA applications Designed for ceiling mount installation Low profile, fully shrouded Supplied with 0.5m coaxial cable Available with N-Type, 4.1/9.5 or 7/16-DIN connector Single band, linear polarized, low profile repulsed for indoor or vehicle repulsed for installation on metal sure. Antenna is user tuned via screw unde. Antenna is supplied with 5 m (16.4 ft) coaxial cable. 		le roof applications surfaces nder antenna base		
lmage		SISO		cys ^O		
		Options	Model Number	Options	Model Number	
		Antenna with N-Type Connector	5211460	Antenna with Unterminated Cable	MA100PQ01	
Ordering Design	ation	Antenna with 4.1/9.5 Connector 5211460-mDIN				
	Antenna with 7/16-DIN Connector 52114		5211460-DIN			
Electrical Charac	teristics					
Frequency		450-470 MHz	Z	380430 MHz Adjust tuning screw under base to achieve required center frequenc		
Impedance		50Ω		50Ω		
Polarization		Vertical		Linear, Perpendicular to Base		
Gain		2.1 dBi		2.1 dBi		
Half Power Beam	width - Horizontal	360°		360°		
Half Power Beam	width - Vertical	80°		80°		
VSWR		< 2.0:1		< 1.5:1		
Max. Power		30 W		20 W		
Intermodulation		-143 dBc IM value for N-Type only applicable	at date of manufacture			
Mechanical Char	acteristics					
Connector		(1x) N-Type, 4.1/9.5 or 7/1 +0.5m (19.7 in) RG58 C		No connector, 5 m (16.4 in) of unte	erminated RG58 cable	
Colour		White		Black		
	Radome	ABS		Polypropelene	e	
Materials	Chassis	Aluminum		Aluminium		
Dimensions		70 x 202 mm (2.8 x	8.0 in)	35 x Ø178 mm (1.4 x	Ø7.0 in)	
Weight		0.47 kg (1.0 lb	es)	0.45 kg (1.0 lb:	s)	
Mounting		Mount with three (3) screws and wa the antenna. Three (3) white caps a screws after install	all plugs supplied with are supplied to hide the	Eight (8) 3.3 mm diameter ho provided for mour	les in base plate	





Model Number		802.01.05	5.00	802.	00.05.00	
Description		1-Band, 1-Port, Ceiling Moun 380-430 MHz,			g Mount Omni, VPOL, 360°, 70 MHz, 1 dBi	
Features		 Compact, stylish and efficient indoor antenna Designed for use with UHF and TETRA systems A ingenius radiator design allows for incredibly broadband operation Stylish design makes for a discreet installation in any modern office or industrial complex Simple to install with the minimum of fuss 		Compact, stylish and efficient indoor antenna Designed for use with UHF, TETRA and PMR systems A ingenius radiator design allows for incredibly broadband operation Stylish design makes for a discreet installation in any modern office or industrial complex Simple to install with the minimum of fuss		
lmage		960		s _i s _O		
0.1.1.0.1		Options	Model Number	Options	Model Number	
Ordering Designa	tion	Antenna with N-Type Connector	802.01.05.00	Antenna with N-Type Con	nector 802.00.05.00	
Electrical Characte	eristics					
Frequency		380-430 M	Hz	380)-470 MHz	
Impedance		50Ω		50Ω		
Polarization		Vertical			Vertical	
Gain		2.0 dBi			1 dBi	
Half Power Beamv	vidth - Horizontal	360°			360°	
Half Power Beamv	vidth - Vertical	80°			80°	
VSWR		< 2.0:1			< 2.0:1	
Max. Power		50 W			50 W	
Intermodulation		-120 dBm (2x Tx @	37 dBm)	-120 dBm	(2x Tx @ 37 dBm)	
Mechanical Chara	cteristics					
Connector		(1x) 500 mm RG303 term	ı. N-Type Socket	(1x) 500 mm RG3	03 term. N-Type Socket	
Colour		White			White	
	Radome	Fire Retardant	t ABS	Fire R	etardant ABS	
Materials	Element	FR4 Printed C	Circuit	FR4 P	rinted Circuit	
Dimensions		81 x Ø231 mm (3.2	2 x Ø9.1 in)	81 x Ø231	mm (3.2 x Ø9.1 in)	
Weight		0.4 kg (0.88	lbs)	0.4 kg (0.88 lbs)		
Mounting		U.4 kg (U.88 lbs) Via three (3) screws on 180 mm PCD		Via three (3) screws on 180 mm PCD		



Model Number		MA100RS00				
Description		1-Band, 0-Port, Ceiling Mount (430480 MHz, 2.				
Features		 Single band, linear polarized, low profile, indoor omni antenna Fully shrouded for indoor or vehicle roof applications Designed for installation on metal surfaces Antenna is user tuned via screw under antenna base Antenna is supplied with 5 m (16.4 ft) of unterminated coaxial cable 				
lmage		550 • • • • • • • • • • • • • • • • • • •	a a			
01: 0: ::		Options	Model Number			
Ordering Designation	on	Antenna with Unterminated Cable	MA100RS00			
Electrical Character	ristics					
Frequency		430480 MH Adjust tuning screw under base to achieve				
Impedance		50Ω				
Polarization		Linear, Perpendicular	r to Base			
Gain		2.1 dBi				
Bandwidth						
Half Power Beamwi	dth - Horizontal	360°				
Half Power Beamwig	dth - Vertical	80°				
VSWR		< 1.5:1				
Max. Power		20 W				
Intermodulation						
Mechanical Charact	eristics					
Connector		No connector, 5 m (16.4 in) of unte	erminated RG58 cable			
Colour		Black				
	Radome	Polypropelene				
Materials	Chassis	Aluminum				
Element						
Dimensions		35 x Ø178 mm (1.4 x	Ø7.0 in)			
Weight		0.45 kg (1.0 lbs)				
IP Rating						
Mounting		Eight (8) 3.3 mm diameter holes in base plate provided for mounting				









Model Number		78244	100		78344	00
Description		2-Band, 2-Port, Microcell F 690-960 1710-2700 N			2-Port, Microcell Pa 5-960 1710-2700 N	nnel, XPOL, 78° 73°, 1Hz, 7.0 7.5 dBi
Features		Dual band, XPOL, microcell p. Long body N-Type connectors Optional mounting systems as or pole mount	 Wideband microcell directional panel operating 695-2700 MHz For use in indoor MIMO and LTE applications Stable performance with low return loss and high gain A compact, lightweight design that is easy to install Passive intermodulation < -153 dBc Available with N-Type, 4.1/9.5, 4.3/10 or 7/16-DIN connectors 			
lmage		MINO		RAIN ^O		
		Options	Model Number	Options		Model Number
		Antenna with N-Type Connector	7824400	Antenna with I	N-Type Connector	7834400
Ordering Designation	on	Antenna with gray overshroud	7824500	Antenna with 4.1/9.5 Connector		7834400-mDIN
		for safety compliance		Antenna with 4.3/10 Connector		7834400-4310
				Antenna with 7/16-DIN Connector 783440		or 7834400-DIN
Electrical Character	ristics					
Frequency		690-960 MHz	1710-2700 MHz	695-806 MHz 806-960 MHz		1710-2700 MHz
Impedance		50Ω		50Ω		
Polarization		±45°			±45°	
Gain		7.0 dBi	11.5 dBi	6.5 dBi	7.0 dBi	7.5 dBi
Half Power Beamwi	dth - Horizontal	80°	70°	78°	73°	73°
Half Power Beamwi	dth - Vertical	75°	23.5°	68°	60°	65°
VSWR		< 2:1 m	nax	≤ 2	2.0	≤ 1.5
Isolation		≥ 20 dB (Tx Band)	≥ 25 dB (Tx Band)	> 20	0 dB	> 23 dB
Max. Power		100 W pe	r port		100 W per	port
Intermodulation		< -153 c	dBc	IM value for N	-153 dE I-Type only applica	c ble at date of manufacture
Front-to-Back Ratio		> 18 c	lB	15 dB	15 dB	25 dB
Mechanical Charact	teristics					
Connector		(2x) N-Type Fem	ale, Bottom	(2x) N-Ty	/pe, 4.1/9.5, 4.3/10	or 7/16-DIN Female
Operating Tempera	ture			-55° to +60° C (-67° to +140° F)		° to +140° F)
Colour		White	e		White	
Matarial	Radome				ABS	
Materials	Chassis					
Dimensions (Length	x Width x Height)	296 x 230 x 112 mm (11.7 x 9.1 x 4.4 in)	305	x 186 x 63 mm (12	2.0 x 7.3 x 2.5 in)
Weight		1.6 kg (3.	5 lbs)		0.7 kg (1.5	lbs)
Mounting		Plate top and bottom. Comes	Wall mounted			



iDAS

Model Number		7691400		PLPI-90	00-1800
Description		2-Band, 2-Port, Microcell Pan 695-960 1710-2700 MF			Patch Antenna 1800 MHz Band
Features		Two, wide band crossed dipoles ±45° polarization Small, white panel antenna Wall-mounted for indoor and outdoor applications		 Low profile antenna for the Patch antenna for indoor u Carefully sealed with a disc Two side connectors enabl wall or ceiling 	se creet white cover
lmage		KHINO		cys ^O	
		Options	Model Number	Туре	Product No.
		Antenna with N-Type Connector	7691400	PCPI-900-1800	100000322
Ordering Designa	ation	Antenna with 4.1/9.5 Connector	7691400-mDIN		
		Antenna with 7/16-DIN Connector	7691400-DIN		
Electrical Charact	teristics			Р	CS
Frequency		695-960 MHz	1710-2700 MHz	880-960 MHz	1710-1880 MHz
Impedance		50Ω		Nom. 50Ω	
Polarization		±45°		Linear	
Gain		7.0 dBi	7.5 dBi	8 dBi	
Bandwidth				80 MHz @ SWR ≤ 2	170 MHz @ SWR ≤ 2
Half Power Beam	width	73-90°	62-90°		zimuth plane evation plane
SWR		VSWR < 2.0:1	VSWR < 2.0:1	<u> </u>	£ 2
Isolation Between	n Ports	> 23 dB			
Max. Power		25 W per po	ort	10	0 W
Intermodulation		-150 dBc IM value for N-Type only applicabl		Not	rated
Front-to-Back Rat	io	> 19 dB			
Mechanical Chara	acteristics				
Connector		(2x) N-Type, 4.1/9.5 or 7/ on 0.5 m (19.7 in) flylead		(2x) N	-Female
Colour	Colour			Marin	e White
	Radome			-	PS
Materials	Chassis			Alun	ninum
Dimensions (Leng	gth x Width x Height)	207 x 207 x 125 mm (8.1	1 x 8.1 x 4.9 in)	Approx. 250 x 200 x 3	0 mm (9.8 x 7.9 x 1.2 in)
Weight		0.6 kg (1.3 ll	bs)	Approx. 0.	4 kg (0.9 lbs)
Mounting		Wall mounted standard - stainless	steel plate, 4 screw holes	For mounting on wall or ce	iling Ø4.5 x 20 mm (4 holes)



Model Number		5003500			5029000		
Description		2-Band, 1-Port, Microc 695-960 1710-27				cell Panel, VPOL, 115°, MHz, 5.0 dBi	
Features		Indoor, microcell antenna Vertically polarized Wall mounted design Dual band performance, c Available with N-Type, 4.1 connectors	covers all I		 Indoor/outdoor, vertically polarized "Shark Fin" panel Vertically polarized Wide beam coverage with limited gain for near use Designed for wall or ceiling mount 		
lmage		cho chi			350		
		Options		Model Number	Options	Model Number	
		Antenna with N-Type Conne	ector	5003500	Antenna with N-Type Connec	tor 5029000	
Ordering Designation		Antenna with 4.1/9.5 Conne	ector	5003500-mDIN	Antenna with 4.1/9.5 Connec	tor 5029000-mDIN	
		Antenna with 4.3/10 Connec	ctor	5003500-4310	Antenna with 7/16-DIN Conn	ector 5029000-DIN	
		Antenna with 7/16-DIN Connector		5003500-DIN			
Electrical Character	ristics						
Frequency		695-960 MHz		1710-2700 MHz	690-27	700 MHz	
Impedance		50Ω			5	0Ω	
Polarization		Vertical			Vertical		
Gain		6.5 dBi		8.0 dBi	5.0 dBi		
Half Power Beamwig	dth - Horizontal	80°		65°	115°		
Half Power Beamwig	dth - Vertical	73°		60°	70°		
VSWR		< 1.8:1			< 1.8:1 Max; < 1.5:1 Typical		
Max. Power		50 W			50 W		
Intermodulation		-153 dBc IM value for N-Type only applicable at date of manufactu		t date of manufacture	-150 dBc IM value for N-Type only applicable at date of manufactu		
Front-to-Back Ratio		> 12 dB		> 18 dB			
Mechanical Charact	eristics						
Connector		(1x) N-Type, 4.1/9.5, 4.3/10 or 7/16-DIN Female, on 0.5 m (19.7 in) cable			(1x) N-Type, 4.1/9.5 or 7/16-DIN Female, on 0.5 m (19.7 in) RG303 cable, white jacket		
Colour		·	Vhite		W	hite	
	Radome			ABS			
Materials	Chassis			Alun	ninum		
Dimensions (Length x Width x Height)		165 x 155 x 50 m	nm (6.5 x 6	5.1 x 2.0 in)	282 x 85 x 182 mm	n (11.1 x 3.3 x 7.2 in)	
Weight		0.25 kg	g (0.6 lbs)		0.5 kg	(1.1 lbs)	
Mounting							
Mounting		Stainless steel flush mount wall plate supplied			Screws supplied for mounting on flat wall		



Model Number		PCPI-D	CS	PCPI-PCS			
Description		Indoor Right Hand Circularly I for the DCS 1710		Indoor Right Hand Circularly Polarized Patch Antenna for the PCS 1850-1990 Band			
Features		 Low profile antenna for the 17 Patch antenna for indoor use Circularly polarized to avoid or Specially designed for closed or Full size 2 λ circular patch ante Carefully sealed with a discree Side connector enables mount 	ut-of-phase signals rooms enna t white cover	 Low profile antenna for the Patch antenna for indoor Circularly polarized to ave Full size 2 λ circular patch Specially designed for clo Carefully sealed with a die Side connector enables me 	use oid out-of-phase signals a antenna osed rooms		
lmage		ass ^O		sks0			
Ordering Designation		Туре	Product No.	Туре	Product No.		
Ordering Designation		PCPI-DCS	100000229	PCPI-PCS	100000230		
Electrical Characteristics		DCS			PCS		
Frequency		1710-1880	MHz	1850-1990 MHz			
Impedance		Nom. 50	Ω	Nom. 50Ω			
Polarization		Circular (Righ	it hand)	Circular (Right hand)			
Gain		Approx. 5 dBic 3	dBd ±2 dB	Approx. 5 dBic 3 dBd ±2 dB			
Half Power Bean	nwidth	Approx. 70° (H- a	nd E-plane)	Approx. 70° (H- and E-plane)			
SWR		≤ 1.5 f.re	es.	≤ 1.5 f.res.			
Max. Power		50 W		50 W			
Intermodulation		Not rate	ed	Not rated			
Mechanical Char	racteristics						
Connector		N-Fema	lle	N-Female			
Colour		Marine W	hite	Mari	ne White		
Radome		PS		PS			
Materials Chassis		Aluminu	ım	Aluminum			
Dimensions (Len	gth x Width x Height)	Approx. 104 x 104 x 40 mm (4.1 x 4.1 x 1.6 in)		Approx. 104 x 104 x	40 mm (4.1 x 4.1 x 1.6 in)		
Weight		Approx. 0.2 kg	(0.4 lbs)	Approx. 0.2 kg (0.4 lbs)			
Mounting		For mounting on wall or ceiling	a Ø4 5 x 10 mm (4 holes)	For mounting on wall or ceiling Ø4.5 x 10 mm (4 holes)			



Model Number		PCPI-DECT		PCPI-UMTS		
Description		Indoor Right Hand Circularly Pola for the 1880-1900 M			arly Polarized Patch Antenna 110-2200 MHz Band	
Features		 Low profile antenna for the 1880-1990 MHz band Patch antenna for indoor use Circularly polarized to avoid out-of-phase signals Specially designed for closed rooms Full size 2 λ circular patch antenna Carefully sealed with a discreet white cover Side connector enables mounting close to wall or ceiling 		 Low profile antenna for the 1910-2200 MHz band Patch antenna for indoor use Circularly polarized to avoid out-of-phase signals Full size 2 λ circular patch antenna Specially designed for closed rooms Carefully sealed with a discreet white cover Side connector enables mounting close to wall or ceiling 		
lmage		350		sko –		
Ordering Design	ation	Туре	Product No.	Туре	Product No.	
Ordering Design	ation	PCPI-DECT	100000158	PCPI-UMTS	100000231	
Electrical Characteristics		DECT		UMTS		
Frequency		1880-1990 MF	·lz	1910-2200 MHz		
Impedance		Nom. 50Ω		Nom. 50Ω		
Polarization		Circular (Right ha	and)	Circular (Right hand)		
Gain		Approx. 5 dBic 3 dB	d ±2 dB	Approx. 5 dBic 3 dBd ±2 dB		
Half Power Beam	width	Approx. 70° (H- and	E-plane)	Approx. 70° (H- and E-plane)		
SWR		≤ 1.5 f.res.		≤ 1.5 f.res.		
Max. Power		50 W		50 W		
Intermodulation		Not rated		Not rated		
Mechanical Char	acteristics					
Connector		N-Female		N-Female		
Colour		Marine White	<u>,</u>	- Marine White		
Radome		PS		PS		
Materials Chassis		Aluminum		Alu	minum	
Dimensions (Length x Width x Height)		Approx. 104 x 104 x 40 mm (4.1 x 4.1 x 1.6 in)	Approx. 104 x 104 x 40 mm (4.1 x 4.1 x 1.6 in)		
Weight		Approx. 0.2 kg (0.	4 lbs)	Approx. 0.2 kg (0.4 lbs)		
Mounting		For mounting on wall or ceiling Ø	4.5 x 10 mm (4 holes)	For mounting on wall or ceiling Ø4.5 x 10 mm (4 holes)		



Description Indoor Right Hand Circularly Polarized Patch Antenna for the DCS/UMTS 1710-2200 MHz Band Low profile antenna for the 1710-2200 MHz band Patch antenna for indoor use Circularly polarized to avoid out-of-phase signals Specially designed for closed rooms Carefully sealed with a discreet white cover Side connector enables mounting close to wall or ceiling Indoor Linearly Polarized for the UMTS 21 Low profile antenna for the UM Patch antenna for indoor use Carefully sealed with a discreet Side connector enables mounting Side connector enables mounting Carefully sealed with a discreet white cover Side connector enables mounting Side connector enables mounting	100 Band ITS 2100 band t white cover		
 Patch antenna for indoor use Circularly polarized to avoid out-of-phase signals Specially designed for closed rooms Carefully sealed with a discreet white cover Side connector enables mounting close to wall or ceiling 	t white cover		
450			
Image	1 1 1 1 1 1 1 1 1 1		
Type Product No. Type	Product No.		
Ordering Designation PCPI-DCS-UMTS 100000242 PCPI-UMTS-2100	100000323		
Electrical Characteristics DCS/UMTS UMTS 21	UMTS 2100		
Frequency 1710-2200 MHz 2110-2170	2110-2170 MHz		
Impedance Nom. 50Ω)Ω		
Polarization Circular (Right hand) Linear			
Gain Approx. 5 dBic 3 dBd 6-9 dBi	i		
Bandwidth ≥ 80 MHz @ SV	NR ≤ 2.0		
Half Power Beamwidth Approx. 70° (H- and E-plane) Approx. 60° (H- ar	Approx. 60° (H- and E-plane)		
SWR ≤ 2.0 ≤ 1.5 f.re	≤ 1.5 f.res.		
Max. Power 50 W 25 W	25 W		
Intermodulation Not rated Not rate	Not rated		
Mechanical Characteristics			
Connector N-Female N-Femal	N-Female		
Colour Marine White Marine Wh	hite		
Radome PS PS	PS		
Materials Chassis Aluminum Aluminum	ım		
Dimensions (Length x Width x Height) Approx. 104 x 104 x 40 mm (4.1 x 4.1 x 1.6 in) Approx. 204 x 204 x 28 mm	Approx. 204 x 204 x 28 mm (8.0 x 8.0 x 1.1 in)		
Weight Approx. 0.2 kg (0.4 lbs) Approx. 0.4 kg	Approx. 0.4 kg (0.9 lbs)		
Mounting For mounting on wall or ceiling Ø4.5 x 10 mm (4 holes) For mounting on wall or ceiling	For mounting on wall or ceiling Ø4.5 x 20 mm (4 holes)		





Model Number	PCPI-WIFI				
Description	Indoor Right Hand Circularly Polarized Patch Antenna for the WIFI 2400-2500 MHz Band				
Features	 Low profile antenna for the 2400-2500 MHz band Patch antenna for indoor use Circularly polarized to avoid out-of-phase signals Specially designed for closed rooms Carefully sealed with a discreet white cover Side connector enables mounting close to wall or ceiling 				
lmage	cys)				
Ordering Designation	Type Product No.				
Ordering Designation	PCPI-WIFI TBD				
Electrical Characteristics	WiFI				
Frequency	2400-2500 MHz				
Impedance	Nom. 50Ω				
Polarization	Circular (Right hand)				
Gain	Approx. 5 dBic 3 dBd ±2 dB				
Half Power Beamwidth	Approx. 70° (H- and E-plane)				
SWR	≤ 2.0				
Max. Power	50 W				
Intermodulation	Not rated				
Mechanical Characteristics					
Connector	N-Female				
Colour	Marine White				
Radome	PS				
Materials Chassis	Aluminum				
Dimensions (Length x Width x Height)	Approx. 104 x 104 x 40 mm (4.1 x 4.1 x 1.6 in)				
Weight	Approx. 0.2 kg (0.4 lbs)				
Mounting	For mounting on wall or ceiling Ø4.5 x 10 mm (4 holes)				





Model Number		XCPI-160-R	XCPI-160-450-RHCP			
Description		Indoor Right Hand Circularly for the 160 MHz	Indoor Right Hand (for the 160 MF	Circularly Polarized Hz and 450 MHz Ba		
Features		Low profile antenna for the 160 M For indoor ceiling or wall use Circularly polarization to avoid ou Reduces flutter considerably Specially designed for closed roc Carefully sealed with a discreet c Side connector enables mounting	Low profile, dual band indoor antenna for wall or ceiling Circularly polarized to optimize indoor coverage Reduces flutter considerably Specially designed for closed rooms Two built-in antennas are combined with a built-in, low insertion loss diplexer, enabling one downlead cable Carefully sealed with a discreet cover Side connector enables mounting close to wall or ceiling			
Image		sig0		sig0		
		Туре	Product No.	Туре	Frequency	Product No.
		XCPI-160-RHCP	100000154	XCPI-160-450-RHCP-s	380-400 MHz	100000495
Ordering Designations				XCPI-160-450-RHCP-f	410-430 MHz	100000498
				XCPI-160-450-RHCP-h	450-470 MHz	100000496
Electrical Characteristics		160 MHz		160 MHz 450 MH) MHz
Frequency		144-175 MH	380-400 MHz 144-175 MHz 410-430 MHz 450-470 MHz			
Impedance		Nom. 50Ω		N	lom. 50Ω	
Polarization		Circular (Right h	Circular (Right hand)			
Gain		Approx. 2 dE	Approx. 2 dBic	Appro	x. 5 dBic	
Half Power Beamwid	dth	Approx. 60° (H- and	Approx. 60	0° (H- and E-plane)		
Bandwidth		≥ 31 MHz @ SW	≥ 8 MHz ≥ 20 MHz			
SWR		≤ 1.5 f.res.		≤ 2		
Max. Power		50 W		25 W		
Intermodulation		Not rated		Not rated		
Mechanical Charact	eristics					
Temperature Range		-30° to +75° C (-22° to +167° F)		-30° to +75° C (-22° to +167° F)		
Connector		N-Female		N-Female		
Colour		Marine White		Marine White		
NA	Radome PS (White)			F	S (White)	
Materials Chassis		Stainless Ste	el	Stainless Steel		
Dimensions (Width)	nensions (Width x Length x Height) Approx. 608 x 608 x 90 mm (23.9 x 23.9 x 3.5 in)		Approx. 608 x 608 x	90 mm (23.9 x 23.	9 x 3.5 in)	
Weight		Approx. 5.5 kg (1)	2.1 lbs)	Approx.	6.0 kg (13.2 lbs)	
Mounting		Ø5.5 mm (4 holes). For optin a groundplane of 1x1 r		Ø5.5 mm (4 holes). a groundplan	For optimum perl e of 1x1 m is requi	
Electrical Characterist	ics for Built-In Diplexer					
Frequency (MHz)				Low Port: 0-225	High Por	t: 330-1300
Max. Input Power				25 W	2	5 W
Insertion Loss				< 0.5 dB	< 0	.5 dB
Isolation				Low to h	igh port: > 45 dB	





Model Number	XCPI-160-900-1800-1900-2100-R					PCPI-70-900-1800-PCS-UMTS-R				5-R
Description				Polarized Ant and UMTS E				d Circularly I M, DCS, PCS		
Features	CircularlyReducesSpeciallyThe 5 bu insertionCarefully	o avoid out-oderably or closed rocas are combers, enabling a discreet co	ined with bui one downlea	als lt-in, low ad cable	Right har specificaCircular pBuilt-in d	nd circularly Ily designed polarization i	station anten polarized, 7 for ceilings s chosen to n low insertic nector	dBic antenna & walls of clo improve link	osed rooms quality	
lmage	SKO		450							
	Туре			Р	roduct No.	Туре		F	requency	Product No.
	XCPI-160-9	00-1800-190	00-2100-R	10	00000203	PCPI-70-900	-1800-PCS-UI	MTS-R-s	380-400 MHz	100000391
Ordering Designations						PCPI-70-900	-1800-PCS-UI	MTS-R-f	410-430 MHz	100000392
						PCPI-70-900	-1800-PCS-UI	MTS-R-I	430-450 MHz	100000393
						PCPI-70-900	-1800-PCS-UI	MTS-R-h	450-470 MHz	100000394
Electrical Characteristics	160 MHz	GSM	DCS	PCS	UMTS	450 MHz	GSM	DCS	PCS	UMTS
Frequency (MHz)	144-175	880-960	1710-1880	1850-1990	1910-2200	380-400 410-430 430-450 450-470	880-960	1710-1880	1850-1990	1910-2200
Impedance			Nom. 50Ω					Nom. 50Ω		
Polarization		Circ	cular (Right h	and)			Circ	cular (Right h	and)	
Gain		A	Approx. 2 dB	ic		Approx. 7 dBic				
Half Power Beamwidth		Approx.	60° (H- and	E-plane)		Approx. 60° (H- and E-plane)				
Bandwidth	≥ 31 MHz @ SWR ≤ 2.5	≥ 80 MHz @ SWR ≤ 2.5	≥ 170 MHz @ SWR ≤ 2.0	≥ 140 MHz @ SWR ≤ 2.0	≥ 240 MHz @ SWR ≤ 3.0	≥ 20 MHz @ SWR ≤ 2.0	≥ 80 MHz @ SWR ≤ 2.0	≥ 170 MHz @ SWR ≤ 3.0	≥ 140 MHz @ SWR ≤ 3.0	≥ 290 MHz @ SWR ≤ 3.0
SWR			≤ 1.5 f.res.					≤ 1.5 f.res.		
Max. Power			25 W					25 W		
Intermodulation			Not rated					Not rated		
Mechanical Characteristics										
Connector			N-Female					N-Female		
Colour			Marine Whit	e				Marine White	е	
Materials	Rad	ome: PS (W	hite); Chass	s: Stainless S	teel	R	adome: PS (White); Chas	sis: Aluminiu	ım
Dimensions (Width x Length x Height)	Appro	8 x 90 mm (2	3.9 x 23.9 x	3.5 in)	Appro	ox. 415 x 41!	5 x 70 mm (1	6.3 x 16.3 x	2.8 in)	
Weight	Approx. 10 kg (22 lbs)						Appr	ox. 2.0 kg (4	.4 lbs)	
Mounting	Ø5.5 mm (4 holes). For optimum performance a ground- plane of 1x1 m is required					Ø4.5 mm (4 holes)				
Electrical Characteristics for Built-In Diplexer	DIP	X 225/330		DIPX 1000/	/1500	DIP	X 500/800		DIPX 1000	/1500
Frequency (MHz)	Low Port: 0-225	High F 330-1			High Port: 1550-2500	Low Port: 0-500	High F 800-1		w Port: -1000	High Port: 1550-2500
Max. Input Power	25 W	/ each port		35 W each	port	35 W	/ each port		35 W each	port
Insertion Loss	0.5 dB	0.5 c	dB C	.5 dB	0.5 dB	≤ 0.7 dB	≤ 0.7	dB ≤	0.8 dB	≤ 1.0 dB
Isolation	Low to h	igh port: 45	dB Lo	w to high po	ort: 45 dB	Low to hiç	gh port: ≥ 45	dB Lov	w to high po	rt: ≥ 45 dB





	Salety					
Model Number		PCPI-TETRA	-LTE800-RH	PCPI-90	0-RHCP	
Description		Indoor Right Hand Circ for the TETRA		Indoor Right Hand Circularly Polarized Patch Antenna for the 900 MHz Band		
Features		Dual band, low profile antenna for the TETRA and LTE bands For indoor ceiling or wall use Circular polarization is chosen to improve link quality Built-in, low insertion loss diplexers make it possible to have only one connector		 Low profile antenna for the 900 MHz band Circularly polarized to avoid out-of-phase signals Specially designed for closed rooms Full size 2 λ circular patch antenna Carefully sealed with a discreet white cover Side connector enables mounting close to wall or ceiling 		
lmage		ele _O		st _O		
		Туре	Product No.	Туре	Product No.	
Ordering Designations		PCPI-TETRA-LTE800-RH	100000522	PCPI-900-RHCP	100000159	
Electrical Characteristics		TETRA	LTE800	9001	MHz	
Frequency (MHz)		380-430 MHz	790-850 MHz	880-96	0 MHz	
Impedance		Nom	. 50Ω	Nom.	50Ω	
Polarization		Circular (R	ight hand)	Circular (Right Hand)		
Gain		Approx	. 7 dBic	Approx. 7 dBic		
Half Power Beamwi	dth	Approx. 60° (H	I- and E-plane)	Approx. 80° (H- and E-plane)		
Bandwidth			<u></u>	≥ 80 MHz		
SWR		<u></u>	2	≤ 2		
Max. Power		35	W	50 W		
Intermodulation		Not	rated	Not rated		
Mechanical Charact	eristics					
Temperature Range		-30° to +75° C (-22° to +167° F)	_ 		
Connector		N-Fe	male	SMA-Female		
Colour		Marine	White	Marine White		
Materials	Radome	PS (V	/hite)	ABS		
Chassis		Alum	inium	Aluminium		
Dimensions (Width x Length x Height)		Approx. 415 x 415 x 70	mm (16.3 x 16.3 x 2.8 in)	Approx. 204 x 204 x 28 mm (8.0 x 8.0 x 1.1 in)		
Weight		Approx. 1.9	kg (4.2 lbs)	Approx. 0.4 kg (0.9 lbs)		
Mounting		Ø4.5 mm	(4 holes)	For mounting on wall or ceiling Ø4.5 x 20 mm (4 holes)		
Electrical Characteris	tics for Built-In Diplexer	DIPX 5	00/800			
Frequency		Low Port: 0-500 MHz	High Port: 800-1300 MHz			
Max. Input Power		35 W ea	ach port		-	
Insertion Loss		0.7 dB 0.7 dB				

Low to high port: 45 dB

Isolation





Model Number	PCF	PI-GPS	PCPI-GPS-EXTEND			
Description		cularly Polarized Antenna GPS Bands	Indoor Right Hand Circularly Polarized Patch Antenna for Extending GPS Coverage			
Features	 Low profile antenna for th Circularly polarized to avo Specially designed for clo Full size 2 λ circular patch Carefully sealed with a dis Side connector enables m 	id out-of-phase signals sed rooms antenna	 To be used where GPS signals are missing Outdoor GPS antenna is necessary Recommended outdoor GPS antenna: GPS 4/ Specifically designed for closed rooms Full size 2 λ circular patch antenna Carefully sealed with a discreet white cover Internal 25 dB selective amplifier PCPI-GPS-EXTEND-12V-5V-N has 5V DC output on N-connector for feeding outside GPS antenna with built-in amplifier PCPI-GPS-EXTEND-12V-12V-N has 12V DC output on N-connector for phantom powering the unit via the signal line 			
lmage	g ₅ O		ele ₀	A. C.		
	Туре	Product No.	Туре	Supply Voltage	Product No.	
	PCPI-GPS	102000001	PCPI-GPS-EXTEND-12V-5V-N		102000002	
Ordering Designations			PCPI-GPS-EXTEND-12V-12V-1	V	102000005	
			ADAPTOR-ACDC-12V-EU		240000040	
			ADAPTOR-ACDC-12V-UK	 5V DC	240000041	
			GPS-4	4.5-5.5 V	112000017	
Electrical Characteristics		GPS	G	PS		
Frequency	157	5 MHz	1575 MHz			
Impedance	No	m. 50Ω	Nom. 50Ω			
Coverage			10 - 16 m*			
Polarization	Circular	Right Hand)	Circular (Right Hand)			
Gain	Approx. 5 dl	Bic 3 dBd ±2 dB	Approx. 5 dBic 3 dBd ±2 dB			
Half Power Beamwidth	Approx. 70°	(H- and E-plane)	Approx. 70° (H- and E-plane)			
SWR	≤ 1.	5 f.res.	≤ 1.5 f.res.			
Supply Voltage			PCPI-GPS-EXTEND-12V-5V-N: 12V on DC connector, 5V out on N-connector for GPS outdoor antenna PCPI-GPS-EXTEND-12V-12V-N: 12V phantom voltage on N-connector or 12V on DC-connector			
Supply Current			Approx. 150 mA			
Max. Power		50 W	Арріох. 130 під			
Intermodulation		t rated				
Mechanical Characteristics			1100.			
Connector	NI.F		N-Female: DC-Connecto	or: Ø2 5 mm -	centre pin	
Colour		ne White	N-Female; DC-Connector: Ø2.5 mm - centre pin			
Materials		Chassis: Aluminium	Marine White Radome: ABS; Chassis: Aluminium			
Dimensions (Width x Length x Height)		40 mm (4.1 x 4.1 x 1.6 in)	Approx. 104 x 104 x 40			
					A 1.0 III)	
Weight		.4 kg (0.9 lbs) on wall or ceiling	Approx. 200 g (0.4 lbs)			
Mounting		mm (4 holes)	For mounting on wall or ceiling Ø4.5 x 10 mm (4 holes)			
Notes			* To achieve 10-16 m coverage PCPI-GPS-EXTEND and the of (Provided donor and	donor antenna	must be 7 dB.	





Model Number	PLPI-TETRA	PLPO-TETRA			
Description	Indoor Linearly Polarized Patch Antenna for the TETRA Band	Outdoor Linearly Polarized Patch Antenna for the TETRA Band			
Features	 Low profile antenna for the 380-470 MHz band Patch antenna for indoor use Specially designed for closed rooms Carefully sealed with a discreet cover Side connector enables mounting close to wall or ceiling Includes mounting bracket Connection also available on back side - see ordering options 	 Low profile antenna for the 380-470 MHz band Patch antenna for outdoor use Carefully sealed with a discreet cover Side connector enables mounting close to wall or ceiling Includes mounting bracket PATCH-MAMO and PATCH-WAMO to be ordered separately 			
lmage	sk ^O	elebo			
	Type Conn. Frequency Product No.	Type Frequency Product No.			
	PLPI-TETRA-s-f Side 380-430 MHz 100000423	PLPO-TETRA-s-f 380-430 MHz 100000424			
Ordering Designations	PLPI-TETRA-I-h Side 430-470 MHz 100000445	PLPO-TETRA-I-h 430-470 MHz 100000446			
	PLPI-TETRA-s-f-BC Back 380-430 MHz 100000581	PLPO-TETRA-s 380-410 MHz 100000476			
	PLPI-TETRA-I-h-BC Back 430-470 MHz TBD				
Available Accessories	PATCH-WAMO 100000511	PATCH-MAMO 100000447			
Available Accessories		PATCH-WAMO 100000511			
Electrical Characteristics	380-470 MHz	380-470 MHz			
Frequency	380-430 MHz or 430-470 MHz (see ordering options)	PLPO-TETRA-s-f PLPO-TETRA-I-h PLPO-TETRA-s 380-430 MHz 430-470 MHz 380-410 MHz			
Impedance	Nom. 50Ω	Nom. 50Ω			
Polarization	Linear	Linear			
Gain	Approx. 7 dBi	Approx. 7 dBic			
Half Power Beamwidth	Approx. 80° (H- and E-plane)	Approx. 80° (H- and E-plane)			
Bandwidth	≥ 50 MHz	≥ 50 MHz ≥ 50 MHz ≥ 30 MHz @ SWR ≤ 2 @ SWR ≤ 2 @ SWR ≤ 1.6			
SWR	≤ 2	≤2 ≤2 ≤1.6			
Max. Power	100 W	100 W			
Intermodulation	Not rated	Not rated			
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)	All metal parts DC-grounded (Connector shows a DC-short)			
Mechanical Characteristics					
Temperature Range	-30° to +75° C (-22° to +167° F)				
Connector	N-Female	N-Female			
Colour	Marine White	Marine White			
Radome	ABS (White)	ABS (White)			
Materials Chassis	Aluminium	Aluminium			
		Approx. 345 x 345 x 60 mm (13.6 x 13.6 x 2.4 in)			
Dimensions (Width x Length x Height)	Approx. 345 x 345 x 60 mm (13.6 x 13.6 x 2.4 in)				
Weight	Approx. 2.3 kg (5.1 lbs)	Approx. 2.3 kg (5.1 lbs)			
Windl Load		173 N @ 160 km/hr (100 mph)			
Mounting	For mounting on wall or ceiling Ø5 mm (3 holes)	For mounting on wall Ø5 mm (3 holes) or mast on 40-55 mm diameter mast tube			





Model Number		PC	PI-xH-	TETRA		PCPO-xH-TETRA			
Description		Indoor Left or Right Hand Circularly Polarized Patch Antenna for the TETRA Band			Outdoor Left or Right Hand Circularly Polarized Patch Antenna for the TETRA Band for Wall or Mast				
Features		Low profile antenna for the 380-470 MHz band Patch antenna for indoor use Circularly polarized to avoid out-of-phase signals Reduces flutter considerably Specifically designed for closed rooms Carefully sealed with a discreet cover Side connector enables mounting close to wall or ceiling Includes mounting bracket Connection also available on back side			Low profile antenna for the 380-470 MHz band Patch antenna for outdoor use on wall or mast Circularly polarized to avoid out-of-phase signals Reduces flutter considerably Carefully sealed with a discreet cover Side connector enables mounting close to wall or ceiling Includes wall mounting bracket PATCH-MAMO and PATCH-WAMO to be ordered separately			iast ignals wall or ceiling	
lmage		sko (•			350	9		
	Polarization	Туре	Conn.	Frequency	Product No.	Туре	Conn.	Frequency	Product No.
		PCPI-LH-TETRA-s-f	Side	380-430 MHz	100000425	PCPO-LH-TETRA-s-f	Side	380-430 MHz	100000427
	Left-Hand Circularly	PCPI-LH-TETRA-I-h	Side	430-470 MHz	100000441	PCPO-LH-TETRA-l-h	Side	430-470 MHz	100000444
	Polarized	PCPI-LH-TETRA-s-f-BC	Back	380-430 MHz	TBD				
Ordering Designation	S	PCPI-LH-TETRA-I-h-BC	Back	430-470 MHz	TBD				
		PCPI-RH-TETRA-s-f	Side	380-430 MHz	100000426	PCPO-RH-TETRA-s-f	Side	380-430 MHz	100000428
	Right-Hand Circularly	PCPI-RH-TETRA-I-h	Side	430-470 MHz	100000442	PCPO-RH-TETRA-I-h	Side	430-470 MHz	100000443
	Polarized	PCPI-RH-TETRA-s-f-BC	Back	380-430 MHz	100000468				
		PCPI-RH-TETRA-I-h-B0	Back	430-470 MHz					
Accessories	Accessories				100000511	PATCH-WAMO			100000511
FI			200.47	20.1411		PATCH-MAMO			100000447
Electrical Characteris Frequency	tics	380-470 MHz		380 430 MHz or	120 470	MHz (soo ordorin	ag options)		
Impedance		380-430 MHz or 430-470 MHz (see ordering options)			380-430 MHz or 430-470 MHz (see ordering options) Nom. 50Ω			ig options/	
Polarization		Nom. 50Ω			Circular (Left-Hand or Right-Hand)				
Gain		Circular (Left-Hand or Right-Hand)			Approx. 7 dBic				
Half Power Beamwidt	 h	Approx. 7 dBic Approx. 80° (H- and E-plane)			Approx. 80° (H- and E-plane)				
Bandwidth	<u> </u>			MHz		> 50 MHz			
SWR				2		≤ 2			
Max. Power) W		100 W			
Intermodulation				rated		Not rated			
Mechanical Characteristics									
Temperature Range		-30° to	+75° C (-22° to +167° l	=)	-30° to	+75° C	(-22° to +167° F))
Connector			N-Fe	male			N-Fe	emale	
Wind Load						173 N	@ 160 k	m/hr (100 mph)	
Colour		Marine White			Marine	e White			
Radome			ABS (White)			ABS (White)	
Materials Chassis			Alum	inium			Alum	ninium	
Dimensions (Width x	Length x Height)	Approx. 345 x	345 x 60	mm (13.6 x 13.	6 x 2.4 in)	Approx. 345 x 3	345 x 60	mm (13.6 x 13.6	x 2.4 in)
Weight		Α	oprox. 2.3	8 kg (5.1 lbs)		Ap	prox. 2.3	3 kg (5.1 lbs)	
Mounting		For mounting	on wall or	ceiling Ø5 mm	n (3 holes)	For mounting of 40-55			
				40-55 mm diameter mast tube					





Model Number		PCPI-70-xH	PCPI-70-900-xHCP	
Description		Indoor Left or Right Hand Circularly Polarized	Indoor Left or Right Hand Circularly Polarized Patch	
Features		Patch Antenna for the 450 MHz Band Low profile antenna for the 450 MHz band Patch antenna for indoor use Circularly polarized to avoid out-of-phase signals Reduces flutter considerably Specifically designed for closed rooms Full size 1/2 λ patch antennas Carefully sealed with a discreet cover Side connector enables mounting close to wall or ceiling Chassis also available in stainless steel Connection also available on back side	Antenna for the 450 MHz and RHCP for 900 MHz Band • Low profile antenna for the 450 MHz and 900 MHz ban • 900 MHz band is fixed RHCP • Circularly polarized to avoid out-of-phase signals • Reduces flutter considerably • Specifically designed for closed rooms • The two built-in antennas are combined with low insertic loss, built-in diplexer, allowing for one downlead cable • Carefully sealed with a discreet cover • Side connector enables mounting close to wall or ceilin • Chassis also available in stainless steel	
lmage		sko (sigo (
	Polarization	Type Conn. Frequency Product No.	Type Conn. Frequency Product No.	
Ordering Designations STANDARD ANTENNA	Left-Hand Circularly Polarized	PCPI-70-LH-s Side 380-400 MHz 100000146 PCPI-70-LH-f Side 410-430 MHz 100000147 PCPI-70-LH-l Side 430-450 MHz 100000148 PCPI-70-LH-h Side 450-470 MHz 100000149 PCPI-70-LH-s-BC Back 380-400 MHz 100000337 PCPI-70-LH-l-BC Back 410-430 MHz 100000338 PCPI-70-LH-l-BC Back 430-450 MHz 100000339 PCPI-70-LH-l-BC Back 450-470 MHz 100000340	PCPI-70-900-LHCP-s Side 380-400 MHz 100000248 PCPI-70-900-LHCP-f Side 410-430 MHz 100000249 PCPI-70-900-LHCP-l Side 430-450 MHz 100000250 PCPI-70-900-LHCP-h Side 450-470 MHz 100000251	
STANDARD ANTENNA	Right-Hand Circularly Polarized	PCPI-70-RH-s Side 380-400 MHz 100000145 PCPI-70-RH-f Side 410-430 MHz 100000143 PCPI-70-RH-I Side 430-450 MHz 100000144 PCPI-70-RH-h Side 450-470 MHz 100000150 PCPI-70-RH-s-BC Back 380-400 MHz 100000333 PCPI-70-RH-i-BC Back 410-430 MHz 100000334 PCPI-70-RH-i-BC Back 430-450 MHz 100000335 PCPI-70-RH-i-BC Back 450-470 MHz 100000336	PCPI-70-900-RHCP-s Side 380-400 MHz 100000252 PCPI-70-900-RHCP-f Side 410-430 MHz 100000253 PCPI-70-900-RHCP-l Side 430-450 MHz 100000254 PCPI-70-900-RHCP-h Side 450-470 MHz 100000255	
Ordering Designations STAINLESS STEEL ANTENNA Electrical Characteristics	Left-Hand Circularly Polarized Right-Hand Circularly Polarized	PCPI-70R-LH-IS Side 380-400 MHz 100000302 PCPI-70R-LH-IF Side 410-430 MHz 100000303 PCPI-70R-LH-IF Side 430-450 MHz 100000303 PCPI-70R-LH-IF Side 450-470 MHz 100000305 PCPI-70R-LH-IF Side 450-470 MHz 100000305 PCPI-70R-RH-IF Side 410-430 MHz 100000306 PCPI-70R-RH-IF Side 410-430 MHz 100000151 PCPI-70R-RH-IF Side 430-450 MHz 100000307 PCPI-70R-RH-IF Side 450-470 MHz 100000152 450 MHz	PCPI-70R-900-LHCP-s Side 380-400 MHz 100000256 PCPI-70R-900-LHCP-f Side 410-430 MHz 100000257 PCPI-70R-900-LHCP-h Side 430-450 MHz 100000259 PCPI-70R-900-LHCP-h Side 450-470 MHz 100000259 PCPI-70R-900-RHCP-s Side 380-400 MHz 100000260 PCPI-70R-900-RHCP-f Side 410-430 MHz 100000261 PCPI-70R-900-RHCP-l Side 430-450 MHz 100000262 PCPI-70R-900-RHCP-h Side 450-470 MHz 100000263 450 MHz 900 MHz	
Frequency		380-400, 410-430, 430-450 or 450-470 MHz (see ordering options)	380-400, 410-430, 430-450 or 450-470 MHz	
Impedance		Nom. 50Ω	Nom. 50Ω	
Polarization		Circular (Left-Hand or Right-Hand)	Circular (Left-Hand or Right-Hand)	
Gain		Approx. 7 dBic 3 dBd	Approx. 2 dBic 0 dBd ±3 dB	
Half Power Beamwidth		Approx. 80° (H- and E-plane)	Approx. 60° (H- and E-plane)	
Bandwidth		≥ 20 MHz @ SWR ≤ 1.8	≥ 20 MHz @ SWR ≤ 1.8 ≥ 80 MHz @ SWR ≤ 1.8	
SWR		≤ 1.5 f.res.	≤ 1.5 f.res.	
Max. Power		100 W	35 W	
Intermodulation		Not rated	Not rated	
Mechanical Characteristic	cs			
Temperature Range		-30° to +75° C (-22° to +167° F)		
Connector		N-Female	N-Female	
Colour		Marine White	Marine White	
Materials		Radome: PS (White); Chassis: Aluminum	Radome: PS (White); Chassis: Aluminium	
Dimensions (Width x Length x Height)		Approx. 415 x 415 x 25 mm (16.3 x 16.3 x 1.0 in)	Approx. 415 x 415 x 70 mm (16.3 x 16.3 x 2.8 in)	
Weight		Approx. 1.8 kg (4 lbs)	Approx. 2.0 kg (4.4 lbs)	
Mounting		For mounting on wall or ceiling Ø4.5 x 20 mm (4 holes)	For mounting on wall or ceiling Ø4.5 x 20 mm (4 holes)	
Electrical Characteristics for Built-In Diplexer			DIPX 500/800	
Frequency			Low Port: 0-500 MHz High Port: 800-130 MHz	
Max. Input Power			35 W each port	
Insertion Loss			≤ 0.5 dB ≤ 0.5 dB	
Isolation			Low to High Port: ≥ 45 dB	
Temperature Range			-30° to +75° C (-22° to +167° F)	



Public Safety

Model Number		5047000		5047420			
Description		1-Band, 1-Port, Microcell Par 380-400 MHz, 4.5		1-Band, 1-Port, Microcell Panel, VPOL, 106°, 410-430 MHz, 4.5 dBi			
Features		 Single band, vertically polarized U For indoor/outdoor use Designed to provide fill-in coverage Easy to install using the integrated 	ge in TETRA networks	 Single band, vertically polarized UHF panel antenna For indoor/outdoor use Designed to provide fill-in coverage in TETRA networks Easy to install using the integrated wall mounting 			
lmage		450		450			
		Options	Model Number	Options	Model Number		
		Antenna with N-Type Connector	5047000	Antenna with N-Type Connector	5047420		
Ordering Designatio	on	Antenna with 4.1/9.5 Connector	5047000-mDIN	Antenna with 4.1/9.5 Connector	5047420-mDIN		
		Antenna with 7/16-DIN Connector	5047000-DIN	Antenna with 7/16-DIN Connector	5047420-DIN		
Electrical Characteristics				PCS			
Frequency		380-400 MHz	7	410-430 MHz	410-430 MHz		
Impedance		50Ω		50Ω			
Polarization		Vertical		Vertical			
Gain		4.5 dBi		4.5 dBi			
Half Power Beamwidth - Horizontal		106°		106°	106°		
Half Power Beamwic	dth - Vertical	112°		112°			
VSWR		< 1.5:1		< 1.5:1			
Max. Power		50 W		50 W			
Intermodulation		-143 dBc IM value for N-Type only applicable	at date of manufacture	-143 dBc IM value for N-Type only applicable at date of manufacture			
Front-to-Back Ratio		> 10 dB		> 10 dB			
Mechanical Characte	eristics						
Connector		(1x) N-Type, 4.1/9.5 or 7/10 on 0.5 m (19.7 in) RG3		(1x) N-Type, 4.1/9.5 or 7/16-DIN Female, on 0.5 m (19.7 in) RG303 cable			
Colour		White		White			
Materials	Radome	UV Resistant, Halogen-Free FR ABS Sec. 2.2b, FAR 25.		UV Resistant, Halogen-Free RF ABS, UL94V-0, CAA No. 8 Sec. 2.2b, FAR 25.853b			
	Chassis	Aluminum		Aluminum			
Dimensions (Length x Width x Height)		305 x 225 x 60 mm (12.0 x	x 8.9 x 2.4 in)	305 x 225 x 60 mm (12.0 x 8.9 x 2.4 in)			
Weight		1.1 kg (2.4 lbs	5)	1.1 kg (2.4 lbs)			
Mounting		Integrated wall mounting	na brackot	Integrated wall mounting bracket			





Model Number		PCPI-800-xH					
Description		Indoor Left or Right Hand Circularly Polarized Patch Antenna for the 800 MHz Band					
Features		Low profile antenna for the 800 MHz band Patch antenna for indoor use Circularly polarized to avoid out-of-phase signals Specially designed for closed rooms Carefully sealed with a discreet white cover Side connector enables mounting close to wall or ceiling					
lmage		SISO	à				
		Туре	Polarization	Product No.			
		PCPI-800-LH	Left-Hand	100000396			
Ordering Designation	ons	PCPI-800-RH	Right-Hand	100000397			
Accessories							
Electrical Character	istics	800 MHz					
Frequency		800-880 MHz					
Impedance		Nom. 50Ω					
Polarization		Circular (Left-Hand or Right-Hand)					
Gain		Approx. 7 dBic					
Half Power Beamwid	dth	Approx. 80° (H- and E-plane)					
Bandwidth		≥ 80 MHz @ SWR ≤ 2					
SWR		≤ 1.5 f.res.					
Max. Power		50 W					
Intermodulation		Not rated					
Mechanical Charact	eristics						
Temperature Range							
Connector		N-Female					
Colour		Marine White					
Materials	Radome	ABS					
Chassis		Aluminium					
Dimensions (Width x Length x Height)		Approx. 204 x 204 x 28 mm (8.0 x 8.0 x 1.1 in)					
Weight		Approx. 0.4 kg (0.9 lbs)					
Mounting		For mounting on wall or ceiling ∅4.5 x 20 mm (4 holes)					











Antennas for InBuilding Applications Omni-Directional Antennas

iDAS

Model Number			7835700		7825100		
Description		1-Band, 1-Port, Stick Omni, VPOL, 360°, 698-2700 MHz, 3.0-4.0 dBi			1-Band, 1-Port, Stick Omni, VPOL, 360°, 800-2700 MHz, 2.5 dBi		
Features		 Indoor, omni antenna Designed for pole or wall mount installation Available with N-Type, Reverse polarity SMA, 4.1/9.5, or 7/16-DIN connector 			 Indoor, omni antenna Mounting kits available for ceiling, wall or pole mounting Multi band performance 		
lmage							
		Options		Model Number	Options	Model Number	
		Antenna with N-Ty	pe Connector	7835700	Antenna with N-Type Connector	7825100	
Ordering Designa	ation	Antenna with 7/16-	-DIN Connector	7835700-DIN			
		Antenna with 4.1/9	Antenna with 4.1/9.5 Connector				
		Antenna with Reverse Polarity SMA		7835700-RPSMA			
Electrical Charact	teristics						
Frequency (MHz)		698-960 MHz	1710-2180 MHz	2200-2700 MHz	800-2700 M	Hz	
Impedance		50Ω			50Ω		
Polarization		Vertical			Vertical		
Gain		3.0-3.5 dBi	3.5 dBi	4.0 dBi	2.5 dBi		
Half Power Beam	width - Horizontal	360°	360°	360°	360°		
Half Power Beam	width - Vertical	65-83°	45°	45°	50°		
VSWR		< 1.8:1	< 1.8:1 < 1.5:1		800-960 MHz: < 1.8:1 960-1710 MHz: < 2.5:1 1710-2700 MHz: < 1.8:1		
Max. Power		100 W			50 W		
Intermodulation		-140 dBc IM value for N-Type only applicable at date of manufacture; Intermodulation not applicable to reverse polarity SMA			Not Rated		
Mechanical Chara	acteristics						
Connector		(1x) N-Type, 4.1/	9.5, 7/16-DIN or Rev Female, Bottom	verse Polarity SMA	(1x) N-Type Female, Bottom		
Operating Temperature		-50°	to +60° C (-58° to +	140° F)			
Colour			White		White		
Materials	Radome		ABS				
Dimensions		67 >	0211 mm (2.6 x Ø8	3.3 in)	209 x Ø30 mm (8.2 x Ø1.2 in)		
Weight			0.3 kg (0.66 lbs)		0.12 kg (0.26 lbs)		
IP Rating					IP65		
Mounting		Wall / Pole Mounting Kit Included			Mounting inteface is four Ø3.4 mm (0.1 in) holes equally spaced on a Ø41 mm (1.6 in) bolt circle. Mounting kits are ordered separately (505-173-5-003; XSL9254316; XSL9254317)		



Antennas for InBuilding Applications Omni-Directional Antennas

Model Number	7825700							
Description	2-Band, 1-Port, Stick Omni, VPOL, 360°, 696-960 1710-2700 MHz, 1.87 3.4 dBi							
Features	For incVersatiVarious	door/outdo le size for	oor use a variety of a g kits availabl		na			
lmage								
	Options			N	lodel Numbe	er		
Ordering Designation			oe Connector		825700			
3 3			.5 Connector		7825700-mDIN			
	Antenna	with 7/16-	DIN Connect	or 78	825700-DIN			
Electrical Characteristics			I					
Frequency (MHz)		60 MHz		1	700 MHz			
	696-806	806-960	1710-1880	1850-1990	1900-2170	2200-2700		
Impedance		50Ω						
Polarization	Ver	Vertical			Vertical			
Gain	1.87 dBi	1.24 dBi	2.5 dBi	3.4 dBi	2.8 dBi	2.9 dBi		
Half Power Beamwidth - Horizontal	360°	360°	360°	360°	360°	360°		
Half Power Beamwidth - Vertical	87.7°	68.3°	44.4°	40.3°	60.3°	36.1°		
VSWR	< 2.5:1 < 2.0:1 <			< 2.5:1				
Max. Power				50 W				
Intermodulation	IM	-153 dBc (2x20W) IM value for N-Type only applicable at date of manufacture						
Mechanical Characteristics								
Connector		(1x) N-Ty	pe, 4.1/9.5 o	r 7/16-DIN Fe	emale, Botto	m		
Colour		White						
Dimensions	234 x Ø30 mm (9.2 x Ø1.2 in)							
Weight	0.11 kg (0.24 lbs)							
Wind Load @ 160 km/hr (100 mph) 4N (1.0 lbf)								
Survival Wind Speed	241 km/hr (150 mph)							
Environmental Protection	IP54							
Mounting	Mounting inteface is four Ø3.4 mm (0.1 in) holes equally spaced on a Ø41 mm (1.6 in) bolt circle. Mounting kits are ordered separately (505-173-5-003; XSL9254316; XSL9254317)							





Antennas for InBuilding Applications Omni-Directional Antennas

Public Safety

Model Number		GPS-4 Quadrifilar Helix Active Antenna. Active Receiving Antenna for the 1575 MHz NAVSTAR GPS Satellite Navigational System.								
Description										
Features		Single Band, right-hand circular polarized, omni antenna Quadrifilar helix antenna element provides full hemispherical coverage Built-in high gain, low noise amplifier High rejection of cross-polarized reflections prevents fading caused by multipath propagation Designed to withstand tough environments Input filter for thorough RF overload protection Comprehensive range of mounting brackets available Available in marine white, black or sand								
lmage		Marine White			Black		Sand	Ł		
O-1i Di		Supply	Connector Marine White (Standard)		Bla	Black		Sand		
Ordering Designa		Voltage	Connector	Туре	Product No.	Туре	Product No.	Туре	Product No.	
When Ordering the From the Options	ne Antenna, Select Shown at Right:	3 V DC	FME	GPS-4-3-V	112000015	GPS-4-3-V-B	112000067	GPS-4-3-V-S	112000068	
		(3-3.5 V)	TNC	GPS-4-3-V-TNC	112000010					
		5 V DC	FME	GPS-4	112000017	GPS-4-B	112000065	GPS-4-S	112000066	
		(4.5-5.5 V)	TNC	GPS-4-5-V-TNC	112000014					
		12 V DC	FME	GPS-4-12-V	112000016	GPS-4-12-V-B	112000069	GPS-4-12-V-S	112000070	
		(9-15 V)	TNC	GPS-4-12-V-TNC	112000012					
Electrical Charact	eristics									
Frequency		1575 MHz								
Polarization		Circular Right Hand								
Coverage		Hemisperical								
Impedance		50Ω (Nominal)								
Gain In Axial Dire	ction	> 32 dBi								
Cross Polarization	Att.		> 10 dB							
Selectivity			> 20 dB down at ±100 MHz							
Intermodulation						N/A				
Built-In Amplifier										
Gain						> 30 dB				
Noise Figure		< 3 dB (including input filter); Typical approximately 3 dB								
1 dB Compression Point		> 10 dBm								
Out of Band Attenuation		0.03 - 1 GHz : > 40 dB down 2 - 10 GHz : > 40 dB down								
SWR (Output)		< 2.0								
	GPS 4/3 V				3-	-3.5 V DC				
Supply Voltage	GPS 4	5 ±0.5 V DC								
	GPS 4/12 V				9	-15 V DC				
Current Consump	rtion		Approximately 44 mA							
EMC		Full Protection (IEC 801, IEC 255)								





Antennas for InBuilding Applications Omni-Directional Antennas

Public Safety

Model Number		GPS-4			
Mechanical Characteristics					
Materials (Antenna Dome)		Weather-Resistant Low-Loss Plastic			
Antenna Colour			Marine White, Black or Sand		
Insulation		Connector	ground terminal galvanically insulated from mounting hardware		
Wind Surface			Approximately 0.0072 m² (0.08 ft²)		
Max Wind Speed			200 km/hr (124.27 mph)		
Wind Load			Approximately 9.6 N at 150 km/hr (93.21 mph)		
Connector		FME-Male (Pin) or TNC-Female			
Suggested Downlead Cable			< 10 m: RG 58; 10-30 m: RG 213		
Total Height / Diameter		Approximately 23 cm (9.06 in) / 33 mm (1.3 in)			
Weight		Approximately 150 g (0.33 lbs)			
Mounting		Vertical on 1" water pipe or on 1" Mounting Bracket			
	Туре	Product Number	Description		
	FLG	110000036	Deck-mounting flange for antennas for 1" water pipe fixation		
	SMR1	110000045	Clamp for side mounting on mast		
	SMR2	110000046	Side-mounting clamp for mounting across windex-plate		
Mounting Kits	LW 1"				
	MariFix 1	110000050	Heavy-duty, chromed brass ratchet mount for deck or bulkhead mounting		
	MariFix 2	110000048	Medium-duty, polycarbonate ratchet mount for deck or bulkhead mounting		
	ADT	110000049	Adapting tube		
Environmental Characteristics					
Temperature Range		-50° to +70° C (-58° to +158° F)			
IP Rating		IP56 (IP66 upon request)			



FME - SYSTEM ACCESSORIES				
FME - Cable		FME - Connector		
Туре	Product No.	Туре	Product No.	
1 m FME FEMALE	130000437	FME FEMALE - FME FEMALE	130000583	
2 m FME FEMALE	130000447	FME MALE - PROLONGATION MALE	130000565	
3 m FME FEMALE	130000457	FME MALE - N-TYPE MALE	130000571	
4 m FME FEMALE	130000466	FME MALE - SMA FEMALE	130000578	
5m FME FEMALE	130000474	FME MALE - BNC MALE	130000566	
6 m FME FEMALE	130000483	FME MALE - TNC MALE	130000569	
4 m FME - White FEMALE	110000064	FME MALE - UHF MALE	130000572	
6 m FME - White FEMALE	110000066	FME MALE - MINI UHF MALE	130000573	
12 m FME - White FEMALE	110000068	FME MALE - ELBOW MINI UHF MALE	130000582	
18 m FME - White FEMALE	110000069			





Antennas for InBuilding Applications Omni-Directional Antennas

Omni-Directional Antennas: Mounting Bracket Kits

Model Number	505-173-5-003	XSL9254316
Description	Universal Wall or Ceiling Mounting Bracket for Small Omni Antennas	Wall Mounting Kit for Small Omni Antennas
Fits Pipe Diameter	Wall Mounted	Wall Mounted
Weight	2.7 kg (6 lbs)	0.5 kg (1.1 lbs)

Model Number	XSL9254317		
Description	Wall or Pole Mounting Kit for Small Omni Antennas		
Fits Pipe Diameter	30-53 mm (1.2-2.1 in)		
Weight	0.5 kg (1.1 lbs)		

Antennas for InBuilding Applications

Jumper Cables

Designed for indoor applications with high flexibility and small bending diameters.

Available in a variety of cable lengths and connector combinations.















FIRE RESISTANT

1/4" Superflexible Jumper Cable

Low Smoke Zero Halogen (LSZH), DC-3 GHz, Low PIM

Available lengths (meters) = Replace (x) in the model number with 1.0, 1.5, 2.0, 3.0, 4.5, 6.0 & 7.5

4.3/10 Male Screw to 4.3/10 Male Screw

AAS-14HFFRD02-43SM43SM-xM



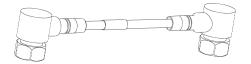
4.3/10 Male Screw to 4.3/10 Male Screw Right Angle

AAS-14HFFRD02-43SM43SMR-xM



4.3/10 Male Screw Right Angle to 4.3/10 Male Screw Right Angle

AAS-14HFFRD02-43SMR43SMR-xM



7/16-DIN Male to 7/16-DIN Male

AAS-14HFFRD02-DMDM-xM



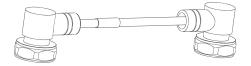
7/16-DIN Male to 7/16-DIN Male Right Angle

AAS-14HFFRD02-DMDMR-xM



7/16-DIN Male Right Angle to 7/16-DIN Male Right Angle

AAS-14HFFRD02-DMRDMR-xM



N Male to N Male

AAS-14HFFRD02-NMNM-xM



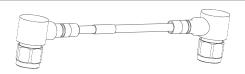
N Male to N Male Right Angle

AAS-14HFFRD02-NMNMR-xM



N Male Right Angle to N Male Right Angle

AAS-14HFFRD02-NMRNMR-xM



Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.





FIRE RESISTANT

1/2" Superflexible Jumper Cable

Low Smoke Zero Halogen (LSZH), DC-3 GHz, Low PIM

Available lengths (meters) = Replace (x) in the model number with 1.0, 1.5, 2.0, 3.0, 4.5, 6.0 & 7.5

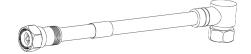
4.3/10 Male Screw to 4.3/10 Male Screw

AAS-12HFFRD02-43SM43SM-xM



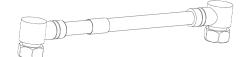
4.3/10 Male Screw to 4.3/10 Male Screw Right Angle

AAS-12HFFRD02-43SM43SMR-xM



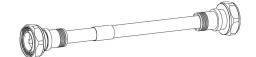
4.3/10 Male Screw Right Angle to 4.3/10 Male Screw Right Angle

AAS-12HFFRD02-43SMR43SMR-xM



7/16-DIN Male to 7/16-DIN Male

AAS-12HFFRSD02-DMDM-xM



7/16-DIN Male to 7/16-DIN Male Right Angle

AAS-12HFFRSD02-DMDMR-xM



7/16-DIN Male Right Angle to 7/16-DIN Male Right Angle

AAS-12HFFRSD02-DMRDMR-xM



N Male to N Male

AAS-12HFFRSD02-NMNM-xM



N Male to N Male Right Angle

AAS-12HFFRSD02-NMNMR-xM



N Male Right Angle to N Male Right Angle

AAS-12HFFRSD02-NMRNMR-xM







#		100000242	22	100000424	28
5003500	19	100000248	30	100000425	29
5005200	7	100000249	30	100000426	29
5005300	7	100000250	30	100000427	29
5005400	8	100000251	30	100000428	29
5029000	19	100000252	30	100000441	29
5047000	31	100000253	30	100000442	29
5047420	31	100000254	30	100000443	29
5052400	9	100000255	30	100000444	29
5052450	9	100000256	30	100000445	28
5056000	11	100000257	30	100000446	28
5086000	10	100000258	30	100000447	28
5087000	10	100000259	30	100000447	29
5211388	12	100000260	30	100000468	29
5211421	12	100000261	30	100000476	28
5211460	13	100000262	30	100000495	24
7691400	18	100000263	30	100000496	24
7824400	17	100000302	30	100000498	24
7824500	17	100000303	30	100000511	28
7825100	34	100000304	30	100000511	28
7825700	35	100000305	30	100000511	29
7834400	17	100000306	30	100000522	26
7835700	34	100000307	30	100000581	28
100000143	30	100000322	18	102000001	27
100000144	30	100000323	22	102000002	27
100000145	30	100000333	30	102000005	27
100000146	30	100000334	30	110000064	37
100000147	30	100000335	30	110000066	37
100000148	30	100000336	30	110000068	37
100000149	30	100000337	30	110000069	37
100000150	30	100000338	30	112000017	27
100000151	30	100000339	30	123005007	15
100000152	30	100000340	30	130000437	37
100000154	24	100000391	25	130000447	37
100000158	21	100000392	25	130000457	37
100000159	26	100000393	25	130000466	37
100000203	25	100000394	25	130000474	37
100000229	20	100000396	32	130000483	37
100000230	20	100000397	32	130000565	37
100000231	21	100000423	28	130000566	37





130000569	37	7691400-DIN18	GPS-4-12-V-B	36
130000571	37	7691400-mDIN18	GPS-4-12-V-S	36
130000572	37	7825700-DIN35	GPS-4-12-V-TNC	36
130000573	37	7825700-mDIN35	GPS-4-3-V	36
130000578	37	7834400-4310 17	GPS-4-3-V-B	36
130000582	37	7834400-DIN17	GPS-4-3-V-S	36
130000583	37	7834400-mDIN17	GPS-4-3-V-TNC	36
24000040	27	7835700-DIN34	GPS-4-5-V-TNC	36
240000041	27	7835700-mDIN 34	GPS-4-B	36
5003500-4310	19	7835700-RPSMA34	GPS-4-S	36
5003500-DIN	19	802.00.05.0014		
5003500-mDIN	19	802.01.05.0014		
5005200-DIN	7		M	
5005200-mDIN	7		MA100PQ01	13
5005300-4310	7	Α	MA100RS00	15
5005300A	8	AAS-12HFFRD02-43SM43SMR-xM 41		
5005300A-4310	8	AAS-12HFFRD02-43SM43SM-xM41		
5005300A-DIN	8	AAS-12HFFRD02-43SMR43SMR-xM 41	P	
5005300A-mDIN	8	AAS-12HFFRSD02-DMDMR-xM41	PATCH-MAMO	28, 29
5005300-DIN	7	AAS-12HFFRSD02-DMDM-xM 41	PATCH-WAMO	28, 29
5005300-mDIN	7	AAS-12HFFRSD02-DMRDMR-xM41	PCPI-70-900-1800-PCS-UMTS-R	25
5005400-4310	8	AAS-12HFFRSD02-NMNMR-xM41	PCPI-70-900-1800-PCS-UMTS-R-f	
5005400-DIN	8	AAS-12HFFRSD02-NMNM-xM41	PCPI-70-900-1800-PCS-UMTS-R-h	
5005400-mDIN	8	AAS-12HFFRSD02-NMRNMR-xM 41	PCPI-70-900-1800-PCS-UMTS-R-I	25
5029000-DIN	19	AAS-14HFFRD02-43SM43SMR-xM	PCPI-70-900-1800-PCS-UMTS-R-s	25
5029000-mDIN		AAS-14HFFRD02-43SM43SM-×M	PCPI-70-900-LHCP-f	
5047000-DIN		AAS-14HFFRD02-43SMR43SMR-xM 40	PCPI-70-900-LHCP-h	30
5047000-mDIN		AAS-14HFFRD02-DMDMR-×M	PCPI-70-900-LHCP-I	
5047420-DIN		AAS-14HFFRD02-DMDM-xM	PCPI-70-900-LHCP-s	
5047420-mDIN		AAS-14HFFRD02-DMRDMR-xM	PCPI-70-900-RHCP-f	
505-173-5-003		AAS-14HFFRD02-NMNMR-xM	PCPI-70-900-RHCP-h	
5052400-DIN		AAS-14HFFRD02-NMNM-×M	PCPI-70-900-RHCP-I	
5052400-mDIN		AAS-14HFFRD02-NMRNMR-xM	PCPI-70-900-RHCP-s	
5052450-4310		ADAPTOR-ACDC-12V-EU27	PCPI-70-900-xHCP	
5052450-DIN		ADAPTOR-ACDC-12V-LV	PCPI-70-LH-f	
5052450-mDIN		ADAI 10K-ACDC-12V-0K27	PCPI-70-LH-f-BC	
5056000-DIN			PCPI-70-LH-h	
5056000-mDIN		G	PCPI-70-LH-h-BC	
5211460-DIN		GPS-4	PCPI-70-LH-N-BC	
5211460-mDIN	13	GPS-4-12-V	PCPI-70-LH-I-BC	30







PCPI-70-LH-s	30	PCPI-LH-TETRA-I-h-BC	29
PCPI-70-LH-s-BC	30	PCPI-LH-TETRA-s-f	29
PCPI-70R-900-LHCP-f	30	PCPI-LH-TETRA-s-f-BC	29
PCPI-70R-900-LHCP-h	30	PCPI-PCS	20
PCPI-70R-900-LHCP-I	30	PCPI-RH-TETRA-l-h	29
PCPI-70R-900-LHCP-s	30	PCPI-RH-TETRA-I-h-BC	29
PCPI-70R-900-RHCP-f	30	PCPI-RH-TETRA-s-f	29
PCPI-70R-900-RHCP-h	30	PCPI-RH-TETRA-s-f-BC	29
PCPI-70R-900-RHCP-I	30	PCPI-TETRA-LTE800-RH	26
PCPI-70R-900-RHCP-s	30	PCPI-UMTS	21
PCPI-70-RH-f	30	PCPI-UMTS-2100	22
PCPI-70-RH-f-BC	30	PCPI-WiFi	23
PCPI-70-RH-h	30	PCPI-xH-TETRA	29
PCPI-70-RH-h-BC	30	PCPO-LH-TETRA-l-h	29
PCPI-70-RH-I	30	PCPO-LH-TETRA-s-f	29
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PCPI-70R-RH-h	30	PLPO-TETRA	28
PCPI-70R-RH-I	30	PLPO-TETRA-I-h	28
PCPI-70R-RH-s	30	PLPO-TETRA-s-f	28
PCPI-70-xH	30	PLPO-TETRA-s-f	28
PCPI-800-LH	32		
PCPI-800-RH	32		
PCPI-800-xH	32		
PCPI-900-1800	18	U	
PCPI-900-RHCP	26	UWB-I-380-6000	11
PCPI-DCS	20		
PCPI-DCS-UMTS	22		
PCPI-DECT	21		
PCPI-GPS	27		
PCPI-GPS-EXTEND	27	Z	
PCPI-GPS-EXTEND-12V-12V-N	27	XCPI-160-450-RHCP	24
PCPI-GPS-EXTEND-12V-5V-N	27	XCPI-160-450-RHCP-f	24
PCPI-LH-TETRA-I-h	29	XCPI-160-450-RHCP-h	24

XCPI-160-450-RHCP-s	. 24
XCPI-160-900-1800-1900-2100-R	. 25
XCPI-160-RHCP	. 24
XSL9254316	. 38
XSL9254317	. 38





Amphenol Private Networks

Making the World Smaller

The Amphenol Private Networks Group consisting of the brands Procom, Skymasts and Jaybeam, offers the strongest and most versatile portfolio of antenna equipment. Amphenol Private Networks (APN) component programme includes couplers and power splitters, dummy loads & attenuators, isolators, circulators & power monitors. APN also offers a very high performance, and a high quality range of combining and filtering equipment produced by Procom in Denmark. With one of the most respected product lines on the market, APN continues connecting people with technology.



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Amphenol Antenna Solutions

Connecting People + Technology

Amphenol Antenna Solutions is a leading global solutions provider for wireless infrastructure systems. Whether it's a complex base station, a small DAS network or an InBuilding System, we supply over 6,000 products with best-in-class performance. With Amphenol Antenna Solutions (AAS), OEMs and operators have the convenience of a one-stop shop, not only for quality antennas, but for transmission line products like feeder cable, hybrid fiber, surge arrestors and connectors as well as RF peripherals like TMAs, combiners, couplers and splitters. And, all products support next generation wireless communication systems. AAS offers years of expertise in product design, development and engineering along with an unparalleled commitment to customer service.



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