



MIMO low/mid/high gain 802.11ac standard (5X5 & 4X4 & 3X3 antennas)

Part Number	Gain	Frequency band	Dimensions
4 X 4 - QUAD Polarization MIMO			
MA-WE2458-MIMO4-5 (120°)	4X5dBi	2.3-2.7 GHz & 4.9-6.1 GHz	200x200x33 mm 7.9"x7.9"x1.25"
MA-WA2455-QPMIMO	16dBi @ 5.15-5.875 GHz 12dBi @ 2.3-2.7 GHz	2.3-2.7 GHz & 5.15-5.875 GHz	305x305x15 mm 12"x12"x0.6"
MA-WD2455-DS18 (90°)	18dBi @ 5.1-5.9 GHz 16dBi @ 2.3-2.7 GHz	2.3-2.7 GHz & 5.1-5.9 GHz	807x464x50 mm 31.77"x18.27"x1.97"
MA-WC2458-MIMO4-8 (90°)	4X6dBi	2.4-2.5 GHz & 5.15-5.875 GHz	200x200x33 mm 7.9"x7.9"x1.25"
MA-WC2458-QP6 (90°)	4X6dBi	2.4-2.5 GHz & 5.15-5.875 GHz	200x200x33 mm 7.9"x7.9"x1.25"
MA-WD2455-DBDP17 (90°)	17dBi @ 5.1-5.9 GHz 15dBi @ 2.4-2.5 GHz	2.4-2.5 GHz & 5.1-5.9 GHz	812x330x70 mm
3 X 3 - Triple Polarization MIMO			
MA-WE2458-3H	3 X 5 dBi	2.3-2.7 GHz & 4.9-6.1 GHz	200x200x33 mm 7.9"x7.9"x1.25"
MA-WC2458-3H	3 X 7.5 dBi	2.4-2.5 GHz & 5.15-5.875 GHz	200x200x33 mm 7.9"x7.9"x1.25"

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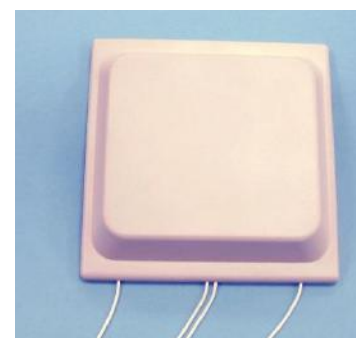
MA-WE2458-MIMO4-5

2.3-2.7 GHz & 4.9-6.1 GHz Dual Band MIMO Applications Sector Antenna, 120°

MARS Dual Band Sector antenna provides coverage of 2.3 to 2.7 GHz & 4.9 to 6.1 GHz in a single antenna radome.

Additional Features:

- Simultaneous coverage of 802.11 a, b, g, e, n, WiMAX & 4.9 GHz Public Safety Bands.
- Light weight and durable construction.
- UV protected radome made of plastic.



Specifications

Electrical

Frequency range	2.3-2.7 GHz & 4.9-6.1 GHz
Peak Gain, typ.	4 x 5 dBi
VSWR, max.	2 : 1 (typ. 1.5 : 1)
Polarization	Double dual Slant $\pm 45^\circ$
3 dB Beam-Width, H-Plane, typ.	120°
3 dB Beam-Width, E-Plane, typ.	70°
Input power, max.	20 Watt
Input Impedance	50 Ohm

Mechanical

Dimensions (W x L x H)	200 x 200 x 33 mm (7.9" x 7.9" x 1.25")
Connector	See Ordering Options
Weight	260 gr.
Back Plane	Aluminum; protected through chemical passivation
Radome	UV Protected Polycarbonate
Mount	See Ordering Options

Environmental

Operating Temperature Range	-40°C to +70°C
Vibration	According to IEC 60721-3-4
Flammability	UL94
Humidity	ETS 300 019-1-4, EN 302 085 (annex A.1.1)

Ordering Options

MA-WE2458-MIMO4-5	Antenna 4 x 75cm Pigtail RG 316 with right angle RPSMA Male with provision for Az/EI adjustable for MNT-22 mount
MA-WE2458-MIMO4-5B	Antenna 4 x 75cm Pigtail RG 316 with right angle RPSMA Male with MNT-22 mount
MA-WE2458-MIMO4-5W	Antenna 4 x 75cm Pigtail RG 316 with right angle RPSMA Male, wall mountable
MA-WE2458-MIMO4-5N	Antenna 4 x 75cm Pigtail RG 316 with N-Type Male with provision for Az/EI adjustable for MNT-22 mount
MA-WE2458-MIMO4-5NB	Antenna 4 x 75cm Pigtail RG 316 with N-Type Male with MNT-22 mount

MARS Antennas & RF Systems proprietary information

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MA-WA2455-QPMIMO

5.15 - 5.875 GHz & 2.3 - 2.7 GHz Quad Polarizations MIMO

MARS Quad Polarization antenna provides coverage of 2.3-2.7 GHz frequency

Band and 5.15-5.875 GHz frequency band in a single antenna radome.

Additional Features:

- Specially designed for MIMO applications
- Light weight and durable construction.
- UV Protected radome made of Polycarbonate.



Can be customized per customer requirements

802.11 ac standard applications approved

Specifications

Electrical

Frequency range	2.3 - 2.7 GHz & 5.15-5.875 GHz
GAIN, typ.	Vertical & Horizontal Pol 16 dBi @ 5.15 - 5.875 GHz Dual Slant Pol. $\pm 45^\circ$ 12 dBi @ 2.3 - 2.7 GHz
VSWR, max.	1.7 : 1
Polarization	Quad Pole Vertical, Horizontal@5.15-5.875 GHz & Dual Slant@ 2.3 - 2.7 GHz
3 dB Beam-Width, Azimuth, typ.	Dual Slant: 38° ; V & H Pol @ 20°
3 dB Beam-Width, Elevation, typ.	Dual Slant: 38° ; V & H Pol @ 20°
Side Lobes, min.	-12 dB
Front to Back Ratio, min.	-30 dB
Isolation Between Bands	-30 dB
Input power, max	10 Watt
Input Impedance	50 Ohm
Lightning Protection	DC Grounded

Mechanical

Dimensions (HxWxD)	305 x 305 x 15 mm.
Connector	4 x N-Type
Weight	1.5 Kg.
Mounting	See Ordering Options
Radome	UV Protected Polycarbonate
Back Plane	Aluminum protected through chemical passivation.

Environmental

Operating Temperature Range	-40°C to +65°C
Vibration	According to IEC 60721-3-4
Wind Load	200 Km/h (Survival)
Flammability	UL94
Water Proofing	IP-67
Humidity	ETS 300 019-1-4, EN 302 085 (Annex A.1.1)
Salt Fog	According to IEC 68-2-11

Ordering Options

MA- WA2455-QPMIMO	Antenna 4 x N-Type connectors Suited for MNT-22 mount
MA- WA2455-QPMIMOB	Antenna 4 x N-Type connectors with MNT-22 mount

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MA-WD2455-DS18

2.3 – 2.7 GHz & 5.1 – 5.9 GHz, 4X4 Dual Band, Dual-Slant Base Station Antenna, 90°

MARS MA-WD2455-DS18 is a 4X4 (MIMO) high gain antenna with Dual band, Dual Slant antenna provides coverage of 2.3-2.7 GHz frequency band and 5.1-5.9 GHz frequency band in a single antenna radome.

Additional Features:

- Designed to meet WAVE2, 802.11ac & more.
- Easy mounting allowing Az/EI adjustment.



Specifications

Electrical

Frequency range	2.3-2.7 GHz	5.1-5.9 GHz
Gain, typ.	16 dBi	18 dBi
VSWR, max.	2.0 : 1	
Polarization, Dual-Slant	±45°	±45°
3 dB Beam-Width, Azimuth, typ.	90°	90°
3 dB Beam-Width, Elevation, typ.	8°	4°
Side Lobes, min.	-10 dB	
Cross Polarization, typ.	-15 dB	
Front to Back Ratio, min.	-32 dB	
Port to Port Isolation, min. Intra-band	-17 dB	-30 dB
Inter-band	-35 dB	
Input power, max	50 Watt	
Input Impedance	50 Ohm	
Lightning Protection	DC Grounded	

Mechanical

Dimensions (HxWxD)	807 x 464 x 50 mm (31.77" x 18.27" x 1.97")
Weight	3 Kg.
Connector	4 x N-Type, Female
Back Plane	Aluminum protected through chemical passivation
Radome	UV Protected Plastic
Mount	MNT-25

Environmental

Operating Temperature Range	-40°C to +65°C
Vibration	According to IEC 60721-3-4
Wind Load	200 km/h (survival)
Flammability	UL94
Water Proofing	IP-65
Humidity	ETS 300 019-1-4, EN 302 085 (annex A.1.1)
Salt Fog	According to IEC 68-2-11

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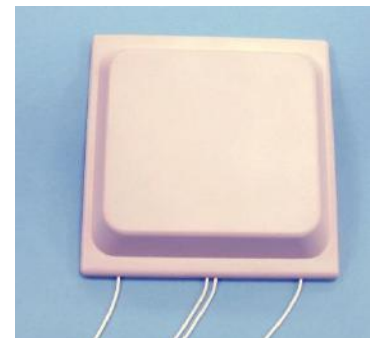
MA-WC2458-MIMO4-8

2.4-2.5 GHz & 5.15-5.875 GHz Dual Band MIMO Applications Sector Antenna 60°

MARS Dual Band Sector antenna provides coverage of 2.4 to 2.5 GHz & 5.15 to 5.875 GHz in a single antenna radome.

Additional Features:

- Wide coverage.
- Total 4 outputs.
- Simultaneous coverage of LTE, 802.11 a, b, g, e, n, WiMAX.
- Point-to-Multi Point, ISM and WLL applications.
- Lightweight and durable construction.
- Quick and easy installation.
- UV protected radome made of polycarbonate.



Specifications

Electrical

Frequency range	2.4-2.5 GHz & 5.15-5.875 GHz
Peak Gain, typ.	4 x 6 dBi
VSWR, max.	2 : 1
Polarization	Double dual Slant $\pm 45^\circ$
3 dB Beam-Width, H-Plane, typ.	60°
3 dB Beam-Width, E-Plane, typ.	60°
Port to Port Isolation, typ.	-25dB
Front to Back, min.	-25dB
Input power, max.	20 Watt
Input Impedance	50 Ohm

Mechanical

Dimensions (W x L x H)	200 x 200 x 33 mm (7.9" x 7.9" x 1.25")
Connector	See Ordering Options
Weight	260 gr.
Back Plane	Aluminum; protected through chemical passivation
Radome	UV Protected Polycarbonate
Mount	See Ordering Options

Environmental

Operating Temperature Range	-40°C to +70°C
Vibration	According to IEC 60721-3-4
Flammability	UL94
Water Proofing	IP-67
Humidity	ETS 300 019-1-4, EN 302 085 (annex A.1.1)
Wind Load	220 km/h

Ordering Options

MA-WC2458-MIMO4-8	Antenna 4 x75cm Pigtail RG 316 with right angle RPSMA Male with provision for Az/EI adjustable for MNT-22 mount
MA-WC2458-MIMO4-8B	Antenna 4 x75cm Pigtail RG 316 with right angle RPSMA Male with MNT-22 mount
MA-WC2458-MIMO4-8W	Antenna 4 x75cm Pigtail RG 316 with right angle RPSMA Male, wall mountable
MA-WC2458-MIMO4-8N	Antenna 4 x 75cm Pigtail RG 316 with N-Type Male with provision for Az/EI adjustable for MNT-22 mount
MA-WC2458-MIMO4-8NB	Antenna 4 x 75cm Pigtail RG 316 with N-Type Male with MNT-22 mount

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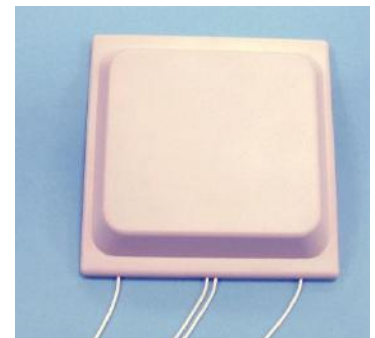
MA-WC2458-QP6

2.4-2.5 GHz & 5.15-5.875 GHz Dual Band Quad pole Sector Antenna 60°

MARS Dual Band Sector antenna provides coverage of 2.4 to 2.5 GHz & 5.15 to 5.875 GHz in a single antenna radome.

Additional Features:

- Wide coverage.
- Total 4 outputs.
- Simultaneous coverage of LTE, 802.11 a, b, g, e, n, WiMAX.
- Point-to-Multi Point, ISM and WLL applications.
- Lightweight and durable construction.
- Quick and easy installation.
- UV protected radome made of polycarbonate.



Specifications

Electrical

Frequency range	2.4-2.5 GHz & 5.15-5.875 GHz
Peak Gain, typ.	4 x 6 dBi
VSWR, max.	2 : 1
Polarization	Dual Slant $\pm 45^\circ$ & Vertical & Horizontal
3 dB Beam-Width, H-Plane, typ.	60°
3 dB Beam-Width, E-Plane, typ.	60°
Port to Port Isolation, typ.	-25 dB @ 2.4 GHz; -30dB @ 5.5 GHz
Front to Back, min.	-25dB
Input power, max.	20 Watt
Input Impedance	50 Ohm

Mechanical

Dimensions (W x L x H)	200 x 200 x 33 mm (7.9" x 7.9" x 1.25")
Connector	See Ordering Options
Weight	260 gr.
Back Plane	Aluminum; protected through chemical passivation
Radome	UV Protected Polycarbonate
Mount	See Ordering Options

Environmental

Operating Temperature Range	-40°C to +70°C
Vibration	According to IEC 60721-3-4
Flammability	UL94
Water Proofing	IP-67
Humidity	ETS 300 019-1-4, EN 302 085 (annex A.1.1)
Wind Load	220 km/h

Ordering Options

MA-WC2458-QP6	Antenna 4 x 75cm Pigtail RG 316 with right angle RPSMA Male with provision for Az/EI adjustable for MNT-22 mount
MA-WC2458-QP6B	Antenna 4 x 75cm Pigtail RG 316 with right angle RPSMA Male with MNT-22 mount
MA-WC2458-QP6W	Antenna 4 x 75cm Pigtail RG 316 with right angle RPSMA Male, wall mountable
MA-WC2458-QP6N	Antenna 4 x 75cm Pigtail RG 316 with N-Type Male with provision for Az/EI adjustable for MNT-22 mount
MA-WC2458-QP6NB	Antenna 4 x 75cm Pigtail RG 316 with N-Type Male with MNT-22 mount

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MA-WD2455-DBDP17

2.4-2.5 GHz & 5.1-5.9 GHz, 4X4 Dual Band, Dual Polarization Base Station Antenna 90°

MARS MA-WD2455-DBDP17 is a 4X4 (MIMO) high gain antenna with Dual band, Dual polarization antenna provides coverage of 2.4-2.5 GHz frequency band and 5.1-5.9 GHz frequency band in a single antenna radome.

Additional Features:

- Designed to meet WAVE2, 802.11ac & more.
- Easy mounting allowing Az/EI adjustment.



Specifications

Electrical

Frequency range	2.4-2.5 GHz	5.1-5.9 GHz
GAIN, typ.	15 dBi	17 dBi
VSWR, max.	<2 : 1	
Polarization	Vertical & Horizontal	
3 dB Beam-Width, H-Plane, typ.	90°	90°
3 dB Beam-Width, E-Plane, typ.	8°	8°
Side Lobes, typ.	-12 dB	
Front to Back Ratio, typ.	-30 dB	
Port to Port Isolation, typ.	-27 dB	
Input power, max	50 Watt	
Input Impedance	50 Ohm	
Lightning Protection	DC Grounded	

Mechanical

Dimensions (HxWxD)	812 X 330 X 70 mm (TBD)
Weight	3 Kg.
Connector	4 x N-Type, Female
Back Plane	Aluminum protected through chemical passivation
Radome	UV Protected Plastic
Mount	MNT-25

Environmental

Operating Temperature Range	-40°C to +65°C
Vibration	According to IEC 60721-3-4
Wind Load	200 km/h (survival)
Flammability	UL94
Water Proofing	IP-65
Humidity	ETS 300 019-1-4, EN 302 085 (annex A.1.1)
Salt Fog	According to IEC 68-2-11

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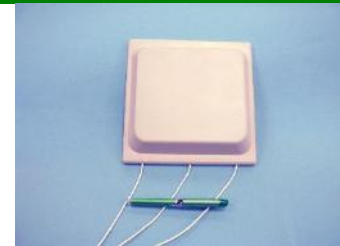
MA-WE2458-3H

2.3-2.7 GHz & 4.9-6.1 GHz Dual Band MIMO Applications Sector Antenna, 120°

MARS Dual Band Sector antenna provides coverage of 2.3 to 2.7 GHz & 4.9 to 6.1 GHz in a single antenna radome.

Additional Features:

- Simultaneous coverage of LTE, 802.11 a, b, g, e, n, WiMAX & 4.9 GHz Public Safety Bands.
- Light weight and durable construction.
- UV protected radome made of polycarbonate.



Specifications

Electrical

Frequency range	2.3-2.7 GHz & 4.9-6.1 GHz
GAIN, typ.	3 x 5 dBi
VSWR, max.	2 : 1 (typ. 1.5 : 1)
Polarization	Vertical & 2 Dual Slant $\pm 45^\circ$
3 dB Beam-Width, H-Plane, typ.	120°
3 dB Beam-Width, E-Plane, typ.	70°
Input power, max.	20 Watt
Input Impedance	50 Ohm

Mechanical

Dimensions (W x L x H)	200 x 200 x 33 mm (7.9" x 7.9" x 1.25")
Connector	See ordering options
Weight	400 gr.
Back Plane	Aluminum; protected through chemical passivation
Radome	UV Protected Polycarbonate
Mount	See Ordering Options

Environmental

Operating Temperature Range	-40°C to +70°C
Vibration	According to IEC 60721-3-4
Flammability	UL94
Water Proofing	IP-67
Humidity	ETS 300 019-1-4, EN 302 085 (annex A.1.1)

Ordering Options

MA-WE2458-3H	Antenna 3 x Coaxial Cable RG 316 with RPSMA, wall mountable
MA-WE2458-3H2	Antenna 3 x Coaxial Cable RG 316 with N-Type male with provision for Az/EI adjustable for MNT-22 mount
MA-WE2458-3H2B	Antenna 3 x Coaxial Cable RG 316 with N-Type male with MNT-22 mount

Patterns are available on our website

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MA-WC2458-3H

2.4-2.5 GHz & 5.15-5.875 GHz Dual Band Small Sector Antenna, 60°

MARS Dual Band Sector antenna provides coverage of 2.4 to 2.5 GHz & 5.15 to 5.875 GHz in a single antenna radome.

Additional Features:

- Wide coverage.
- Light weight and durable construction.
- UV protected radome made of polycarbonate.



Specifications

Electrical

Frequency range	2.4-2.5 GHz & 5.15-5.875 GHz
GAIN, typ.	3 x 7.5 dBi
VSWR, max.	1.8 : 1
Polarization	Linear Vertical & Dual Slant $\pm 45^\circ$
3 dB Beam-Width, H-Plane, typ.	70° @ 2.4-2.5 GHz; 65° @ 5.15-5.875 GHz
3 dB Beam-Width, E-Plane, typ.	65° @ 2.4-2.5 GHz; 60° @ 5.15-5.875 GHz
Input power, max.	20 Watt
Input Impedance	50 Ohm

Mechanical

Dimensions (W x L x H)	200 x 200 x 33 mm (7.9" x 7.9" x 1.25")
Connector	See ordering options
Weight	400 gr.
Back Plane	Aluminum; protected through chemical passivation
Radome	UV Protected Polycarbonate
Mount	See ordering options

Environmental

Operating Temperature Range	-40°C to +70°C
Vibration	According to IEC 60721-3-4
Flammability	UL94
Water Proofing	IP-67
Humidity	ETS 300 019-1-4, EN 302 085 (annex A.1.1)

Ordering Options

MA-WC2458-3H	Antenna 3 x Coaxial Cable RG 316 with RPSMA Male, wall mountable
MA-WC2458-3H2	Antenna 3 x Coaxial Cable RG 316 with N-Type Male with provision for Az/EI adjustable for MNT-22 mount
MA-WC2458-3H2B	Antenna 3 x Coaxial Cable RG 316 with N-Type Male with MNT-22 mount

Patterns are available on our website

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