



In-Building / DAS Antennas

Multi Band, Multi Polarized,
Flat Panel & OMNI
Any Size, Any Frequency, Any Gain Ratio

MOBILE INDOOR
LTE MIMO
WI-FI
OMNI WLAN
OUTDOOR

www.mars-antennas.com

Wi-Fi Hot spot antennas

| Part Number | Description | Frequency band | Gain | Polarization | Dimensions (LxWxD) in mm |
|--------------------------|--|--------------------------|-----------|--|--------------------------|
| MA-WE2458-MIMO4-5 | Dual Band Sector Antenna, 120° | 2.3-2.7 & 4.9-6.1 GHz | 4 X 5 dBi | 2 x Dual Slant $\pm 45^\circ$ | 200 x 200 x 33 |
| MA-WC2458-MIMO4-8 | Dual Band Sector Antenna 60° | 2.4-2.5 & 5.15-5.875 GHz | 4 X 6 dBi | Dual Slant $\pm 45^\circ$ & Dual Slant $\pm 135^\circ$ | 200 x 200 x 33 |
| MA-WC2458-QP6 | Dual Band Quad pole Sector Antenna 60° | 2.4-2.5 & 5.15-5.875 GHz | 4 X 6 dBi | Dual Slant $\pm 45^\circ$ & Vertical & Horizontal | 200 x 200 x 33 |

Multi Band In-Building/Outdoor Antennas

TETRA, CDMA, GSM, UMTS, WLAN, WLL, Wi-Fi & WiMax

| Part Number | Description | Frequency band | Gain | Polarization | Dimensions (LxWxD) in mm |
|--------------------|---|---|--|------------------|---------------------------------------|
| MA-CQ26-1X | 380 MHz -6 GHz Multi Band Omni | 380-806 MHz 806-960 MHz 1395-1432 MHz 1710-2170 MHz 2300-2500 MHz 3300-3700 MHz 4900-6000 MHz | 1 (2*) dBi 4 dBi 5 dBi 5 dBi 5 dBi 5 dBi 6 dBi | Linear, Vertical | Base Dia. - 275 Height - 187 mm |
| MA-CQ27-1X | 380 MHz -6 GHz Multi Band Omni | 380-806 MHz 806-960 MHz 1395-1432 MHz 1710-2170 MHz 2300-2700 MHz 3300-3700 MHz 4900-6000 MHz | 1 (2*) dBi 4 dBi 5 dBi 5 dBi 6 dBi 6 dBi 6 dBi | Linear, Vertical | Base Dia. - 275 Height - 187 mm |
| MA-CQ29-1X | 380 MHz -6 GHz Multi Band Omni | 380-806 MHz 806-960 MHz 1700-2500 MHz 2500-2700 MHz 3300-3700 MHz 4900-6000 MHz | 1 (2*) dBi 4 dBi 5 dBi 5 dBi 6 dBi 6 dBi | Linear, Vertical | Base Dia. - 275 Height - 187 mm |
| MA-WA43-1X | In-Building Panel | 425-445 MHz | 4 dBi | Linear, Vertical | 225 x 215 x 29 mm |
| MA-WA46-1X | In-Building Panel | 450-470 MHz | 4 dBi | Linear, Vertical | 231 x 215 x 29 mm |
| MA-WOLTE-3X | LTE, GSM, UMTS, WLAN, Wi-Fi Multi Band Omni | 698-806 MHz 806-960 MHz 1710-2170 MHz 2300-2700 MHz 3300-3800 MHz 4900-6500 MHz | 2 dBi 2 dBi 3-4 dBi 5 dBi 4 dBi 6 dBi | Linear, Vertical | Base Dia. - 205 Height - 89 mm |

| Part Number | Description | Frequency band | Gain | Polarization | Dimensions (LxWxD) in mm |
|---------------------|---|--|---|--|---|
| MA-WOLTE-3M1 | 698-6500 MHz Multi Band Tri-Ports Omni | Port 1 & 2 698-960 MHz 1710-2170 MHz 2.3-2.7 GHz. 3.3-3.8 GHz 4.9- 6.5 GHz Port 3 1710-2170 MHz 2.3-2.7 GHz 3.3-3.8 GHz 4.9- 6.5 GHz | 2 dBi 3-4 dBi 5 dBi 4 dBi 6 dBi 3 dBi 3 dBi 4 dBi 6 dBi | Linear, Vertical | Antenna dimension (D,H): 220 x 95 mm Base dimension (L,W,H): 369 x 270 x 30 mm |
| MA-WOLTE-DP1 | 698-6500 MHz Multi Band Dual Polarized Omni | Vertical 698-960 MHz 1710-2170 MHz 2.3-2.7 GHz 3.3-3.8 GHz 4.9- 6.5 GHz Horizontal 2.3-2.7 GHz 4.9- 5.875 GHz | 4 dBi 5 dBi 5.5 dBi 7 dBi 7.5 dBi 5 dBi 5 dBi | Linear, Vertical | Base Diameter 275 mm Height 190 mm |
| MA-CLTE-14 | LTE, GSM, UMTS, WLAN, Wi-Fi Multi Band Panel | 698-806 MHz 806-960 MHz 1710-2170 MHz 2200-2700 MHz | 5 dBi 6 dBi 6.5 dBi 5 dBi | Mixed, Vertical and Horizontal | 231 x 215 x 37.5 mm |
| MA-WOLTE-DP2 | 698-6500 MHz Multi Band Tri-Ports Omni | Port 1 1.7-2.7 GHz Port 2 4.4-6.6 GHz Port 3 698-960 MHz 1.7-2.3 GHz 2.3-2.7 GHz. 3.3-3.8 GHz 4.5- 6.6 GHz | 5 dBi 6 dBi 4 dBi 3-4 dBi 5.5 dBi 4 dBi 6 dBi | Linear, Horizontal Linear, Horizontal Linear, Vertical | Antenna dimension (D,H): 220 x 95 mm (Stand out from the ceiling) |
| MA-CR26-2X | Multi Band Omni | 806-960 MHz 1710-2170 MHz 2300-2700 MHz 3400-3700 MHz 4900-6000 MHz | 2 dBi 3-4 dBi 5 dBi 5 dBi 5-6 dBi | Linear, Vertical | Base Dia. - 205 Height - 89 mm |
| MA-CM36-15 | Multi Band Omni | 806-960 MHz 1710-2170 MHz 2300-2700 MHz | 2 dBi 3-4 dBi 5 dBi | Linear, Vertical | Base Dia. - 205 Height - 89 mm |
| MA-CL67-15 | GSM, UMTS, WLAN Multi Band Panel | 806-960 MHz 1710-2170 MHz 2200-2700 MHz | 8.5 dBi 7.5-10 dBi 5-6.5 dBi | Linear, Vertical | 231 x 215 x 37.5 mm |
| MA-CN14-11 | Multi Band 140° | 806-960 MHz 1710-2170 MHz | 5 dBi | Linear, Vertical | 175 x 35 x 125 mm |
| MA-CC60-60 | Dual Beam GSM | 870-960 MHz 2.4-2.5 GHz | 3.5 dBi 4.5 dBi | Linear, Vertical | 184 x 100 x 125 mm |

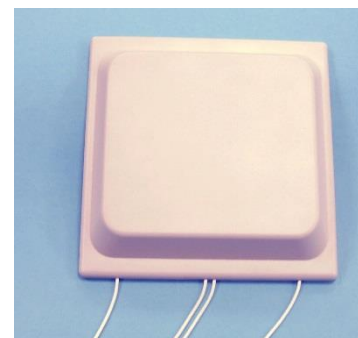
MA-WE2458-MIMO4-5

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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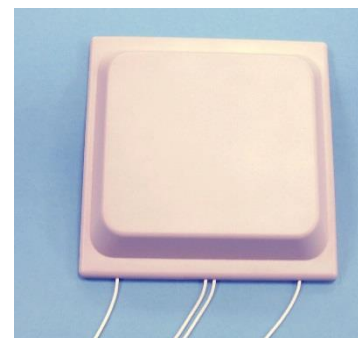
MA-WC2458-MIMO4-8

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 x 75cm Pigtail RG 316 with right angle RPSMA Male with provision for Az/EI adjustable for MNT-22 mount |
| MA-WC2458-MIMO4-8B | Antenna 4 x 75cm Pigtail RG 316 with right angle RPSMA Male with MNT-22 mount |
| MA-WC2458-MIMO4-8W | Antenna 4 x 75cm 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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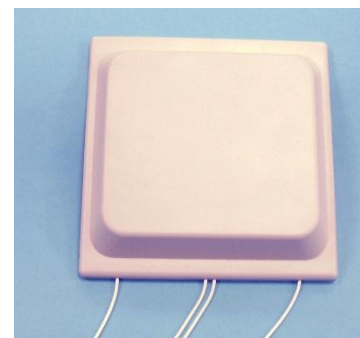
MA-WC2458-QP6

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-CQ26-1X

380 MHz-6 GHz Multi Band Omni Antenna

MARS Multi Band Omni Antenna covers all the bands for 2G, 2.5G and 3G cellular, as well as ISM, WLAN, UNII, Bluetooth, Wi-Fi, WMTS and IMT-MC450. The antenna is aesthetic and has unobtrusive profile that blends easily with any environment.

The antenna is easy-installed and is highly recommended as an outstanding logistic solution for In-Building Installations.

The antenna is PIM certified, thus making it suitable for all multi-carrier systems.



Specifications

Electrical

| Standard | TETRA, IMT-MC450, WMTS, DVB-T LTE | SMR, AMPS, CDMA, TDMA, GSM 900 | WMTS, PCS, DECT, GSM 1900, UMTS | Bluetooth, ISM, WLAN | WLL, Broad-band access Licensed Band | Home land Security, UNII, WLL, H-LAN, Wi-Fi |
|--------------------------------|-----------------------------------|--------------------------------|----------------------------------|----------------------|--------------------------------------|---|
| Frequency range | 380-806 MHz | 806-960 MHz | 1.395-1.432 GHz 1.71-2.17 GHz | 2.3-2.5 GHz | 3.3-3.7 GHz | 4.9-6 GHz |
| GAIN, typ. | 1 (2*) | 4 | 5 | 5 | 5 | 6 |
| VSWR, max. | 3:1 (2.5:1*) | 2 : 1 | 2 : 1 | 2 : 1 | 1.9 : 1 | 1.9 : 1 |
| Polarization | Linear, Vertical | | | | | |
| Input power, max. | 50 Watt | | | | | |
| Input Impedance | 50 Ohm | | | | | |
| PIM, 3rd order, 2X20W (option) | <-155 dBc | | | | | |

Mechanical

| | |
|--------------------|--|
| Dimensions (HxWxD) | Base Diameter - 275 mm, Height - 187 mm |
| Weight | 550 gr. |
| Connector | N-Type, Female |
| Back Plane | Aluminum; protected through chemical passivation |
| Radome | UV Protected Polycarbonate |
| Water Proofing | IP-67 (for outdoor use only) |
| Mount | Ceiling Mounting |

Environmental

| | |
|-----------------------|---|
| Operating Temp. Range | -40°C to +65°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-CQ26-1X | Antenna Indoor |
| MA-CQ26-1XT | Antenna Indoor with DC Return Option |
| MA-CQ26-1XR | Antenna Outdoor |
| MA-CQ26-1XP | Antenna Indoor PIM Certified |
| MA-CQ26-1XTP | Antenna Indoor with DC Return Option PIM Certified |
| MA-CQ26-1XRP | Antenna Outdoor PIM Certified |

(*) Specifications for Ground Plate of 40 cm and up, or above a metal surface, with a spacing of 35-45 mm.

Patent Pending

Patterns are available on our website.

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MA-CQ27-1X

380 MHz-6 GHz Multi Band Omni Antenna

MARS Multi Band Omni Antenna covers continuously all the bands from 380 to 960 MHz and for 4G, 3G, 2.5G and 2G cellular, as well as ISM, WLAN, UNII, Bluetooth, Wi-Fi, WMTS IMT-MC450 and LTE.

The antenna is aesthetic and has unobtrusive profile that blends easily with any environment.

The antenna is easy-installed and is highly recommended as an outstanding logistic solution for fast deployments and "In-Building" installations. The antenna is available also for outdoor applications.

The antenna is PIM certified thus making it suitable for all multi-carrier systems.



Specifications

Electrical

| Standard | TETRA, IMT- MC450, WMTS, DVB-T LTE | SMR, AMPS, CDMA, TDMA, GSM 900 | WMTS, PCS, DECT, GSM 1900, UMTS, AWS-3 | Bluetooth, ISM, WLAN | WLL, Broadband access Licensed Band | Homeland Security, UNII, WLL, H-LAN, Wi- Fi |
|--|---|---|--|----------------------------|---|---|
| Frequency range | 380-806 MHz | 806-960 MHz | 1.395-2.3 GHz | 2.3-2.7 GHz | 3.3-3.8 GHz | 4.9-6 GHz |
| GAIN, typ. | 1 (2*) | 4 | 5 | 6 | 6 | 6 |
| VSWR, max. | 3:1 (2.5:1*) | 2 : 1 | 2 : 1 | 2.6 : 1 | 1.8 : 1 | 1.6 : 1 |
| Polarization | Linear, Vertical | | | | | |
| Input power, max | 50 Watt | | | | | |
| Input Impedance | 50 Ohm | | | | | |
| PIM, 3 rd order, 2X20W (optional) | <-150 dBc | | | | | |

Mechanical

| | |
|-------------------|--|
| Dimensions(HxWxD) | Base Diameter - 275 mm, Height - 187 mm |
| Weight | 550 gr. |
| Connector | N-Type, Female |
| Back Plane | Aluminum; protected through chemical passivation |
| Radome | UV Protected Polycarbonate |
| Water Proofing | IP-67 (for outdoor use only) |
| Mount | Ceiling Mounting |

Environmental

| | |
|-----------------------|---|
| Operating Temp. Range | -40°C to +65°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-CQ27-1X | Antenna Indoor |
| MA-CQ27-1XT | Antenna Indoor with DC Return Option |
| MA-CQ27-1XR | Antenna Outdoor |
| MA-CQ27-1XP | Antenna Indoor PIM certified |
| MA-CQ27-1XTP | Antenna Indoor with DC Return Option PIM certified |
| MA-CQ27-1XRP | Antenna Outdoor PIM certified |

(*) Specifications for Ground Plate of 40 cm and up, or above a metal surface, with a spacing of 35-45 mm.

Patent Pending

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The antenna is aesthetic and has unobtrusive profile that blends easily with any environment.

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Specifications

Electrical

| Standard | TETRA, IMT- MC450, WMTS, DVB-T | SMR, AMPS, CDMA, TDMA, GSM 900 | WMTS, PCS, DECT, GSM 1900, UMTS | Bluetooth, ISM, WLAN | WLL, Broad- band access Licensed Band | Homeland Security, UNII, WLL, H-LAN, Wi-Fi |
|--------------------------------|--|--|--|----------------------------|--|--|
| Frequency range | 380-806 MHz | 806-960 MHz | 1.7-2.5 GHz | 2.5-2.7 GHz | 3.3-3.7 GHz | 4.9-6 GHz |
| GAIN, typ. | 1 (2*) | 4 | 5 | 5 | 6 | 6 |
| VSWR, max. | 3:1 (2.5:1*) | 2 : 1 | 2 : 1 | 2.5 : 1 | 1.6 : 1 | 1.6 : 1 |
| Polarization | Linear, Vertical | | | | | |
| Input power, max. | 50 Watt | | | | | |
| PIM, 3rd order, 2X20W (option) | <-155 dBc | | | | | |
| Input Impedance | 50 Ohm | | | | | |

Mechanical

| | |
|--------------------|--|
| Dimensions (HxWxD) | Base Diameter - 275 mm, Height - 187 mm |
| Weight | 550 gr. |
| Connector | N-Type, Female |
| Back Plane | Aluminum; protected through chemical passivation |
| Radome | UV Protected Polycarbonate |
| Mount | Ceiling Mounting |

Environmental

| | |
|-----------------------|---|
| Operating Temp. Range | -40°C to +65°C |
| Vibration | According to IEC 60721-3-4 |
| Flammability | UL94 |
| Water Proofing | IP-67 (for outdoor use only) |
| Humidity | ETS 300 019-1-4, EN 302 085 (annex A.1.1) |

Ordering Options

| | |
|--------------|--|
| MA-CQ29-1X | Antenna Indoor |
| MA-CQ29-1XT | Antenna Indoor with DC Return Option |
| MA-CQ29-1XR | Antenna Outdoor |
| MA-CQ29-1XP | Antenna Indoor PIM Certified |
| MA-CQ29-1XTP | Antenna Indoor with DC Return Option PIM Certified |
| MA-CQ29-1XRP | Antenna Outdoor PIM Certified |

(*) Specifications for Ground Plate of 40 cm and up, or above a metal surface, with a spacing of 35-45 mm.

Patent Pending

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MA-WA43-1X

425-445 MHz In Building Panel Antenna

MARS 425-455 MHz Panel Antenna provides a cost effective solution for In Building PMR applications.

Additional Features:

- Excellent and stable performance
- Small and aesthetic profile
- UV protected antenna radome
- Suitable for both indoor and outdoor installations
- DC grounded
- Wall mount



Specifications

Electrical

| | |
|--------------------------------|------------------|
| Frequency range | 425-445 MHz |
| GAIN, typ. | 4 dBi |
| VSWR, max. | 1.7 : 1 |
| Polarization | Linear, Vertical |
| 3 dB Beam-Width, H-Plane, typ. | 100° |
| 3 dB Beam-Width, E-Plane, typ. | 110° |
| Input power, max | 20 Watt |
| Input Impedance | 50 Ohm |

Mechanical

| | |
|--------------------|--|
| Dimensions (HxWxD) | 231 x 215 x 31 mm (8.9" x 8.5" x 1.1") |
| Weight | 840 gr. |
| Connector | N-Type, (F)/ Pigtail ending in N-Type (F) |
| Back Plane | Aluminum protected through chemical passivation |
| Radome | UV Protected Plastic |
| Mount | Wall-Indoor Usage (Outdoor Version Available on Request) |

Environmental

| | |
|-----------------------------|---|
| Operating Temperature Range | -40°C to +65°C |
| Vibration | According to IEC 60721-3-4 |
| Wind Load | N/A |
| 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 |
| Ice and Snow | 25mm radial (survival) |

Ordering Options

| | |
|-------------|----------------------------|
| MA-WA43-1X | N-Type Connector Version |
| MA-WA43-1XC | N-Type + Cable RG58, ~25cm |

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3 Hamanor st. Holon 5886103, P.O.Box 1852 Holon 5811801, Israel

Tel: +972-3-5599661 • Fax: +972-3-5599677 • e-mail: mars@marsant.co.il • web: www.mars-antennas.com

MA-WA46-1X

450-470 MHz In Building Panel Antenna

MARS 450 - 470 MHz Panel Antenna provides a cost effective solution for In Building PMR applications.

Additional Features:

- Excellent and stable performance
- Small and aesthetic profile
- UV protected antenna radome
- Suitable for both indoor and outdoor installations
- DC grounded
- Wall mount



Specifications

Electrical

| | |
|--------------------------------|------------------------|
| Frequency range | 450-470 MHz |
| GAIN, typ. | 4 dBi |
| VSWR, | typ 1.5:1, max 1.7 : 1 |
| Polarization | Linear, Vertical |
| 3 dB Beam-Width, H-Plane, typ. | 100° |
| 3 dB Beam-Width, E-Plane, typ. | 110° |
| Input power, max | 20 Watt |
| Input Impedance | 50 Ohm |

Mechanical

| | |
|--------------------|---|
| Dimensions (HxWxD) | 231 x 215 x 31 mm (8.9" x 8.5" x 1.1") |
| Weight | 840 gr. |
| Connector | See Ordering Options |
| Back Plane | Aluminum protected through chemical passivation |
| Radome | UV Protected Plastic |
| Mount | Wall mount |

Environmental

| | |
|-----------------------------|---|
| Operating Temperature Range | -40°C to +75°C |
| Vibration | According to IEC 60721-3-4 |
| Wind Load | N/A |
| Flammability | UL94 |
| Water Proofing | IP-65, (IP67 for Outdoor version) |
| Humidity | ETS 300 019-1-4, EN 302 085 (annex A.1.1) |
| Salt Fog | According to IEC 68-2-11 |
| Ice and Snow | 25mm radial (survival) |

Ordering Options

| | |
|-------------|--|
| MA-WA46-1X | Antenna with N-Type Female Connector |
| MA-WA46-1XC | Antenna with N-Type Female + Cable RG58, ~25cm |
| MA-WA46-1XS | Antenna Outdoor with SMA Female Connector |

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MA-WOLTE-3X

698 MHz-6.5 GHz Multi Band Omni Antenna

MARS Multi Band Omni Antenna covers all the bands for 2G, 2.5G and 3G cellular, as well as UHF (760-960 MHz), LTE (698-806 MHz), ISM, WLAN, UNII, Bluetooth and Wi-Fi bands.

The antenna is aesthetic, small and has unobtrusive profile that blends easily with any environment.

The antenna is easy-installed and is highly recommended as an outstanding logistic solution for In-Building Installations.

The antenna is PIM certified, thus making it suitable for all multi-carrier systems.



Specifications

Electrical

| Standard | LTE | SMR, AMPS, CDMA, TDMA, GSM 900 | PCS, DECT, GSM 1900, UMTS | Bluetooth, ISM, WLAN | WLL | UNII, WLL, H-LAN, Wi-Fi |
|--------------------------------|------------------|--|------------------------------------|-------------------------|-------------|----------------------------------|
| Frequency range | 698-806 MHz | 806-960 MHz | 1.71-2.17 GHz | 2.3-2.7 GHz | 3.3-3.8 GHz | 4.9-6.5 GHz |
| GAIN, typ. | 2 | 2 | 3-4 | 5 | 4 | 6 |
| VSWR, max. | 2:1 | 2.2 : 1 | 1.9 : 1 | 2.1 : 1 | 2 : 1 | 2: 1 |
| Polarization | Linear, Vertical | | | | | |
| Input power, max. | 50 Watt | | | | | |
| Input Impedance | 50 Ohm | | | | | |
| PIM, 3rd order, 2X20W (option) | -150 dBc | | | | | |

Mechanical

| | |
|--------------------|--|
| Dimensions (HxWxD) | Base Diameter - 205 mm, Height - 89 mm |
| Weight | 220 gr. |
| Connector | N-Type, Female (See Ordering Options) |
| Back Plane | Glass epoxy |
| Radome | UV Protected Polycarbonate |
| Mount | See Ordering Options |

Environmental

| | |
|-----------------------------|---|
| Operating Temperature Range | -40°C to +65°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-WOLTE-3X | Ceiling Mountable |
| MA-WOLTE-3X1 | Ceiling option with central connector mounting (Long N-type 45 mm) |
| MA-WOLTE-3XA | Ceiling Mountable with 38 cm pigtail |
| MA-WOLTE-3XB | Ceiling/Wall Adjustable with MNT-22 mount |
| MA-WOLTE-3XT | Ceiling/Wall Provision for Adjustable with MNT-22 mount with DC Return |
| MA-WOLTE-3XP | Ceiling Mountable PIM certified |
| MA-WOLTE-3X1P | Ceiling option with central connector mounting (Long N-type 45 mm) PIM certified |
| MA-WOLTE-3XAP | Ceiling Mountable with 38 cm pigtail PIM certified |
| MA-WOLTE-3XBP | Ceiling/Wall Adjustable with MNT-22 mount PIM certified |
| MA-WOLTE-3XTP | Ceiling/Wall Provision for Adjustable with MNT-22 mount with DC Return PIM certified |

Patterns are available on our website

Patent Pending

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Tel: +972-3-5599661 • Fax: +972-3-5599677 • e-mail: mars@marsant.co.il • web: www.mars-antennas.com

MA-WOLTE-3M1

698-6500 MHz Multi Band Tri-Ports Omni Antenna

MARS Multi Band Tri-Ports Omni Antenna provides coverage of 698-6500 MHz in a single antenna radome. The Multi Band Tri-Ports Omni Antenna is easy-installed on ceiling and is highly recommended as an outstanding logistic solution for In-Building and outdoor installations and applications. Additional Features:

- Low/mid gain.
- UV protected radome made of polycarbonate.



Specifications

Electrical

| Frequency Range | 698-6500 MHz | |
|------------------------|--|--|
| GAIN, typ | Port 1 & 2 2 dBi @ 698-960 MHz 3-4 dBi @ 1710-2170 MHz 5 dBi @ 2.3-2.7 GHz 4 dBi @ 3.3-3.8 GHz 6 dBi @ 4.9- 6.5 GHz | Port 3 3 dBi @ 1710-2170 MHz 3 dBi @ 2.3-2.7 GHz 4 dBi @ 3.3-3.8 GHz 6 dBi @ 4.9-6.5 GHz |
| VSWR, max. | < 2 : 1 | |
| Polarization | Linear, Vertical | |
| Input power, max | 5 Watt | |
| 3 dB Beam Width-Plane | Omni directional | |
| Port to Port Isolation | 698-960 MHz > -14dB & 1710-2170 MHz > -20dB & 2.3-2.7 GHz @ 3.3-3.8 GHz > -25dB & 4.9-6.5 GHz > -30dB | |
| Input Impedance | 50 Ohm | |

Mechanical

| | |
|----------------------------------|----------------------------|
| Visible dimension (Dia x H) * | 220 x 45 mm |
| Antenna dimension (L x W x H) ** | 369 x 270 x 95 mm |
| Weight | 900 gr. |
| Connector | See ordering information |
| Back Plane | UV Protected Polycarbonate |
| Radome | UV Protected Polycarbonate |
| Mounting | Ceiling |

Environmental

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

Ordering Options

| | |
|---------------|---|
| MA-WOLTE-3M1 | 3x Pigtail 6 feet LMR-195 with N-Type Male (Plenum Rated Cable) |
| MA-WOLTE-3M1N | Antenna 3 x N-Type Female |

(*) Dimensions for installation inside the ceiling tile

(**) Dimension for installation outside of the tile (4 screws)

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Tel: +972-3-5599661 • Fax: +972-3-5599677 • e-mail: mars@marsant.co.il • web: www.mars-antennas.com

MA-WOLTE-DP1

698 MHz – 6.5 GHz Multi Band Dual Polarized Omni Antenna

MARS Multi Band Omni Antenna covers continuously all the bands from 698 to 6500 MHz in Vertical Polarization and 2.3-2.7 GHz & 4.9-5.875 GHz Band in Horizontal Polarization in a single antenna radome.

The antenna is aesthetic and has unobtrusive profile that blends easily with any environment.

The antenna is easy-installed and is highly recommended as an outstanding logistic solution for fast deployments and "In-Building" installations. The antenna is available also for outdoor applications.

The antenna is PIM certified thus making it suitable for all multi-carrier systems.



Specifications

Electrical

| Polarization | Horizontal | | Vertical | | | | |
|----------------------------------|-------------|---------------|-------------|---------------|-------------|-------------|-------------|
| Frequency range | 2.3-2.7 GHz | 4.9-5.875 GHz | 698-960 MHz | 1.71-2.17 GHz | 2.3-2.7 GHz | 3.3-3.8 GHz | 4.9-6.5 GHz |
| GAIN, typ. | 5 dBi | 5 dBi | 4 dBi | 5 dBi | 5.5 dBi | 7 dBi | 7.5 dBi |
| VSWR, max. | 2 : 1 | | | | | | |
| Input power, max. | 10 Watt | | | | | | |
| Input Impedance | 50 Ohm | | | | | | |
| PIM, 3rd order, 2X20W (optional) | <-150 dBc | | | | | | |
| Port to Port Isolation, typ. | -40 dB | | | | | | |

Mechanical

| | |
|--------------------|--|
| Dimensions (HxWxD) | Base Diameter – 275 mm, Height – 190 mm |
| Weight | 400 gr. |
| Connector | 2 x N-Type, Female |
| Back Plane | Aluminum; protected through chemical passivation |
| Radome | UV Protected Plastic |
| Mount | Ceiling Mounting |

Environmental

| | |
|-----------------------------|---|
| Operating Temperature Range | -40°C to +65°C |
| Vibration | According to IEC 60721-3-4 |
| Water Proofing | See Ordering Options |
| Flammability | UL94 |
| Humidity | ETS 300 019-1-4, EN 302 085 (annex A.1.1) |

Ordering Options

| | |
|----------------|--------------------------------------|
| MA-WOLTE-DP1 | Antenna Indoor |
| MA-WOLTE-DP1R | Antenna Outdoor (IP67) |
| MA-WOLTE-DP1P | Antenna Indoor PIM certified |
| MA-WOLTE-DP1RP | Antenna Outdoor (IP67) PIM certified |

Patterns are available on our website

Patent Pending

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3 Hamanor st. Holon 5886103, P.O.Box 1852 Holon 5811801, Israel

Tel: +972-3-5599661 • Fax: +972-3-5599677 • e-mail: mars@marsant.co.il • web: www.mars-antennas.com

MA-CLTE-14

Multi Band Panel Antenna

Up-To-Date Multi Band Panel Antenna covers all the bands for LTE 700 MHz, cellular bands, as well as ISM, WLAN, GSM1800, UMTS and Bluetooth. The antenna is aesthetic, small and has unobtrusive profile that blends easily with any environment. The antenna can be easily used either for Indoor or Outdoor Applications and features different mounting options.



Specifications

Electrical

| Standard | LTE 700 | SMR,AMPC, CDMA,TDMA GSM 900 | GSM 1800, UMTS | Bluetooth, ISM, WLAN |
|--------------------------------|------------------|-----------------------------------|-------------------|----------------------------|
| Frequency range | 698-806 MHz | 806-960 MHz | 1710-2170 MHz | 2.2-2.7 GHz |
| GAIN, typ. | 5 ± 1dBi | 6 ± 1dBi | 6.5 ± 1dBi | 5 ± 1 dBi |
| VSWR, max. | 2 : 1 | 2 : 1 | 1.7 : 1 | 1.7 : 1 |
| 3 dB Beam-Width, H-Plane, typ. | 130° | 140° | 80° | 55° |
| 3 dB Beam-Width, E-Plane, typ. | 70° | 60° | 45° | 30° |
| Polarization | Linear, Vertical | | | |
| Input power, max. | 10 Watt | | | |
| Input Impedance | 50 Ohm | | | |

Mechanical

| | |
|--------------------|--|
| Dimensions (HxWxD) | 231 x 215 x 37.5 mm (9.1" x 8.5" x 1.5") |
| Weight | 500 gr. |
| Connector | N-Type, Female at bottom (can be installed also upside down) |
| Back Plane | UV Protected Plastic (metal reinforced from the inside) |
| Radome | UV Protected Polycarbonate |
| Mount | See Ordering Options |

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 |
| Ice and Snow | 25mm radial (survival) |

Ordering Options

| Application | Wall Mountable | Az/EI Adjustable MNT-22 Mount |
|------------------------------|----------------|-------------------------------|
| Indoor / Outdoor | MA-CLTE-14 | MA-CLTE-14B |
| Indoor / Outdoor + DC Return | MA-CLTE-14T | MA-CLTE-14TB |

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3 Hamanor st. Holon 5886103, P.O.Box 1852 Holon 5811801, Israel

Tel: +972-3-5599661 • Fax: +972-3-5599677 • e-mail: mars@marsant.co.il • web: www.mars-antennas.com

MA-WOLTE-DP2

698 MHz – 6.6 GHz Multi Band Dual Polarized Omni Antenna

MARS Multi Band Omni Antenna covers continuously all the bands from 698 MHz to 6.6 GHz in Vertical Polarization and 1.7-2.7 GHz & 4.6-6.6 GHz Band in Horizontal Polarization in a single antenna radome.

The antenna is aesthetic and has unobtrusive profile that blends easily with any environment.

The antenna is easy-installed and is highly recommended as an outstanding logistic solution for fast deployments and "In-Building" installations. The antenna is available also for outdoor applications.



Specifications

Electrical

| | Port 1 | | Port 2 | | Port 3 | | |
|-----------------------------|---------------------|-------------|------------------|-------------|-------------|-------------|-------------|
| Frequency range | 1.7-2.7 GHz | 4.5-6.6 GHz | 698-960 MHz | 1.7-2.3 GHz | 2.3-2.7 GHz | 3.3-3.8 GHz | 4.6-6.6 GHz |
| GAIN, typ. | 5 dBi | 6 dBi | 4 dBi | 3-4 dBi | 5.5 dBi | 4 dBi | 6 dBi |
| Polarization. | Linear, Horizontal | | Linear, Vertical | | | | |
| Horizontal Beam width | Omni 360° | | | | | | |
| VSWR | 1.5:1 typ. 2:1 max. | | | | | | |
| Input power, max. | 30 Watt | | | | | | |
| Input Impedance | 50 Ohm | | | | | | |
| Port to Port Isolation, typ | -40 dB | | | | | | |

Mechanical

| | |
|----------------------------------|-------------------------------------|
| Visible dimension (Dia x H) * | 220 x 45 mm |
| Antenna dimension (L x W x H) ** | 369 x 270 x 95 mm |
| Weight | 900 gr. |
| Connector | 3 x N-Type, Female |
| Back Plane | UV Protected Polycarbonate |
| Radome | UV Protected Polycarbonate |
| Mounting | Ceiling Mounting or through 4 holes |

Environmental

| | |
|-----------------------|---|
| Operating Temp. Range | -40°C to +65°C |
| Vibration | According to IEC 60721-3-4 |
| Water Proofing | Ordering Option |
| Flammability | UL94 |
| Humidity | ETS 300 019-1-4, EN 302 085 (annex A.1.1) |

Patent Pending

Available configuration for port 1 & port 2. Other configurations available upon request.

Ordering Options

| Indoor Product Name | Outdoor Product Name (IP67) | Port 1 gain | Port 2 gain |
|---------------------|-----------------------------|-------------|-------------|
| MA-WOLTE-DP2 | MA-WOLTE-DP2R | 5dBi | 6dBi |
| MA-WOLTE-DP2-5-0 | MA-WOLTE-DP2-5-0R | 5dBi | N/A |
| MA-WOLTE-DP2-2-6 | MA-WOLTE-DP2-2-6R | 2dBi | 6dBi |
| MA-WOLTE-DP2-2-0 | MA-WOLTE-DP2-2-0R | 2dBi | N/A |
| MA-WOLTE-DP2-0-6 | MA-WOLTE-DP2-0-6R | N/A | 6dBi |

(*) Dimensions for installation inside the ceiling tile

(**) Dimension for installation outside of the tile (4 screws)

Patterns are available on our website

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3 Hamanor st. Holon 5886103, P.O.Box 1852 Holon 5811801, Israel

Tel: +972-3-5599661 • Fax: +972-3-5599677 • e-mail: mars@marsant.co.il • web: www.mars-antennas.com

MA-CR26-2X

Multi Band Omni Antenna

MARS Multi Band Omni Antenna covers all the bands for 2G, 2.5G and 3G cellular, as well as ISM, WLAN, UNII, Bluetooth and Wi-Fi.
 The antenna is aesthetic, small and has unobtrusive profile that blends easily with any environment.
 The antenna is easy-installed and is highly recommended as an outstanding logistic solution for In-Building Installations.

The antenna is PIM certified, thus making it suitable for all multi-carrier systems.



Specifications

Electrical

| Standard | SMR, AMPS, CDMA, TDMA, GSM 900 | PCS, DECT, GSM 1900, UMTS | Bluetooth, ISM, WLAN | WLL | UNII, WLL, H-LAN, Wi-Fi |
|--|--|------------------------------------|-------------------------|----------------|----------------------------|
| Frequency range | 806-960 MHz | 1.71-2.17 GHz | 2.3-2.7 GHz | 3.4-3.7 GHz | 4.9-6 GHz |
| GAIN, typ. | 2 | 3-4 | 5 | 5 | 5-6 |
| VSWR, max. | 2 : 1 | 1.6 : 1 | 1.6 : 1 | 2 : 1 | 1.8 : 1 |
| Polarization | Linear, Vertical | | | | |
| Input power, max | 50 Watt | | | | |
| Input Impedance | 50 Ohm | | | | |
| PIM, 3 rd order, 2X20W (optional) | <-155 dBc | | | | |

Mechanical

| | |
|--------------------|--|
| Dimensions (HxWxD) | Base Diameter - 205 mm, Height - 89 mm |
| Weight | 220 gr. |
| Connector | N-Type, Female |
| Back Plane | Aluminum; protected through chemical passivation |
| Radome | UV Protected Polycarbonate |
| Mount | Ceiling Mounting |

Environmental

| | |
|-----------------------------|---|
| Operating Temperature Range | -40°C to +65°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-CR26-2X | Antenna Indoor |
| MA-CR26-2XR | Antenna Outdoor |
| MA-CR26-2XT | Antenna Indoor with DC Return Option |
| MA-CR26-2XP | Antenna Indoor PIM Certified |
| MA-CR26-2XRP | Antenna Outdoor PIM Certified |
| MA-CR26-2XTP | Antenna Indoor with DC Return Option PIM Certified |

Patterns are available on our website

Patent Pending

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3 Hamanor st. Holon 5886103, P.O.Box 1852 Holon 5811801, Israel

Tel: +972-3-5599661 • Fax: +972-3-5599677 • e-mail: mars@marsant.co.il • web: www.mars-antennas.com

MA-CM36-15

Multi Band Omni Antenna

MARS Multi Band Omni Antenna covers all the bands for 2G, 2.5G and 3G cellular, as well as ISM, WLAN and Bluetooth.

The antenna is aesthetic, small and has unobtrusive profile that blends easily with any environment.

The antenna is easy-installed and is highly recommended as an outstanding logistic solution for In-Building Installations.



Specifications

Electrical

| Standard | SMR, AMPS, CDMA, TDMA, GSM 900 | PCS, DECT, GSM 1900, UMTS | Bluetooth, ISM, WLAN |
|----------------------|--------------------------------|---------------------------|----------------------|
| Frequency range | 806-960 MHz | 1.71-2.17 GHz | 2.3-2.7 GHz |
| GAIN, typ. | 2 dBi | 3-4 dBi | 5 dBi |
| VSWR, max. | 2 : 1 | 1.5 : 1 | 1.6 : 1 |
| Polarization | Linear, Vertical | | |
| Input power, max. | 50 Watt | | |
| Input Impedance | 50 Ohm | | |
| Lightning Protection | DC Grounded | | |

Mechanical

| | |
|--------------------|--|
| Dimensions (HxWxD) | Base Diameter - 205 mm, Height - 89 mm |
| Weight | 220 gr. |
| Connector | N-Type, Female |
| Back Plane | Aluminum; protected through chemical passivation |
| Radome | UV Protected Polycarbonate |
| Mount | Ceiling Mounting |

Environmental

| | |
|-----------------------------|---|
| Operating Temperature Range | -40°C to +65°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-CM36-15 | Antenna Indoor |
| MA-CM36-15R | Antenna Outdoor |
| MA-CM36-15T | Antenna Indoor with DC Return Option |

Patterns are available on our website

Patent Pending

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Tel: +972-3-5599661 • Fax: +972-3-5599677 • e-mail: mars@marsant.co.il • web: www.mars-antennas.com

MA-CL67-15

Multi Band Panel Antenna

Up-To-Date Multi Band Panel Antenna covers all the bands for 2G, 2.5G and 3G cellular, as well as ISM, WLAN and Bluetooth.

The antenna is aesthetic, small and has unobtrusive profile that blends easily with any environment.

The antenna can be easily used either for Indoor or Outdoor Applications and features different mounting options.

Antenna is designed to include DC Return Option which is available on request.



Specifications

Electrical

| Standard | SMR, AMPS, CDMA, TDMA, GSM 900 | PCS, DECT, GSM 1900, UMTS | Bluetooth, ISM, WLAN |
|--------------------------------|--------------------------------|---------------------------|--|
| Frequency range | 806-960 MHz | 1.71-2.17 GHz | 2.2-2.7 GHz |
| GAIN, typ. | 8.5 dBi | 7.5-10 dBi | 5-6.5 dBi |
| VSWR, max. | 2 : 1 | 1.7 : 1 | 1.9 : 1 @ 2.2-2.5 GHz 2.1 : 1 @ 2.5-2.7 GHz |
| 3 dB Beam-Width, H-Plane, typ. | 75° | 60° | 50° |
| 3 dB Beam-Width, E-Plane, typ. | 65° | 45° | 25° |
| Polarization | Linear, Vertical | | |
| Input power, max. | 50 Watt | | |
| Input Impedance | 50 Ohm | | |

Mechanical

| | |
|--------------------|--|
| Dimensions (HxWxD) | 231 x 215 x 37.5 mm (9.1" x 8.5" x 1.5") |
| Weight | 500 gr. |
| Connector | N-Type, Female at bottom (can be installed also upside down) |
| Back Plane | UV Protected Plastic (metal reinforced from the inside) |
| Radome | UV Protected Polycarbonate |
| Mount | See Ordering Options |

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 |
| Ice and Snow | 25 mm radial (survival) |

Ordering Options

| Application | Wall Mountable | Az/EI Adjustable MNT-22 Mount |
|-------------------|----------------|-------------------------------|
| Without DC Return | MA-CL67-15 | MA-CL67-15B |
| With DC Return | MA-CL67-15T | MA-CL67-15TB |

Patterns are available on our website

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3 Hamanor st. Holon 5886103, P.O.Box 1852 Holon 5811801, Israel

Tel: +972-3-5599661 • Fax: +972-3-5599677 • e-mail: mars@marsant.co.il • web: www.mars-antennas.com

MA-CN14-11

Multi Band 140° Antenna

MARS Multi Band 140° Antenna covers all the bands for 2G, 2.5G and 3G cellular.

The antenna is aesthetic, small and has unobtrusive profile.



Specifications

Electrical

| | | |
|--------------------------------|--------------------------------|---------------------------|
| Standard | SMR, AMPS, CDMA, TDMA, GSM 900 | PCS, DECT, GSM 1900, UMTS |
| Frequency range | 806-960 MHz | 1.71-2.17 GHz |
| GAIN, typ. | 5 dBi | |
| VSWR, max. | 2 : 1 | |
| 3 dB Beam-Width, H-Plane, typ. | 130° | 140-150° |
| 3 dB Beam-Width, E-Plane, typ. | 70° | 85° |
| Polarization | Linear, Vertical | |
| Input power, max. | 50 Watt | |
| Input Impedance | 50 Ohm | |

Mechanical

| | |
|-------------------------------|--|
| Dimensions - Base Plate (HxW) | 185 x 105 mm (7.3" x 4.1") |
| Dimensions - Radome (HxWxD) | 175 x 35 x 125 mm (6.9" x 1.4" x 4.9") |
| Weight | 260 gr. |
| Connector | Pig Tail with N-Type, Female |
| Back Plane | Aluminum; protected through chemical passivation |
| Radome | UV Protected Plastic |

Environmental

| | |
|-----------------------------|---|
| Operating Temperature Range | -40°C to +65°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-CN14-11 | Antenna Indoor |
| MA-CN14-11R | Antenna Outdoor |

Patterns are available on our website

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MA-CC60-60

Dual Beam GSM Wi-Fi Antenna

MARS Dual Beam GSM Antenna is ideal for deployment in tunnels or long building corridors ceiling. It features small and unobtrusive profile that blends easily with any environment.

Applicable Applications:

- Tunnel coverage.
- Indoor cell extender.



Specifications

Electrical

| | | |
|--------------------------------|------------------|-------------|
| Frequency range | 870-960 MHz | 2.4-2.5 GHz |
| GAIN, min. | 3.5 dBi | 4.5 dBi |
| 3 dB Beam-Width, H-Plane, typ. | 2 x 90° | 2 x 85° |
| 3 dB Beam-Width, E-Plane, typ. | 66° | 60° |
| VSWR, max. | 1.8 :1 | |
| Polarization | Linear, Vertical | |
| Input power, max | 50 Watt | |
| Input Impedance | 50 Ohm | |

Mechanical

| | |
|--------------------|-------------------------------------|
| Dimensions (HxWxD) | 184 x 100 x 125 mm. |
| Weight | 240 gr. |
| Connector | N-Type Female/Side Pigtail Optional |
| Back Plane | Aluminum, Conversion Coated |
| Radome | ABS, UV Protected |
| Mount | Ceiling Mountable |

Environmental

| | |
|-----------------------------|---|
| Operating Temperature Range | -10°C to +65°C |
| Vibration | According to IEC 60721-3-4 |
| Wind Load | Survival: Indoor use. |
| 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 |
| Ice and Snow | 25mm Radial |

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3 Hamanor st. Holon 5886103, Israel

P.O.B 1852 Holon 5811801, Israel

Tel: +972-3-5599661

Fax: +972-3-5599677

E-mail: mars@marsant.co.il

www.mars-antennas.com



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