

1710-2690 | 1710-2690 | 1710-2690 | 1710-2690 | 3300-3800 | 3300-3800 | 3300-3800 | 3300-3800 MHz

8838108N

8Xpol | 65° Az | 16.2/16.2/16.2/16.2/19.5/19.5/19.5/19.5 dBi | 2-20°/2-20°/2-20°/2-20°/2-12°/2-12°/2-12°/2-12° | 1938 mm

- Octa band Wideband antenna, dual polarisation, 16 connectors
- Independent tilt on each band 2-20° / 2-20° / 2-20° / 2-20° / 2-12° / 2-12° / 2-12° / 2-12°
- MET or RET versions

| ORDERING OPTIONS | MODEL NUMBER |
|--------------------------------|------------------|
| Manual Electrical Tilt Antenna | 8838108N |
| Remote Electrical Tilt Antenna | 8838108NG |

ACCESS PORT DESCRIPTION (CONNECTORS)

This antenna has 16 connectors located at the bottom face.

| Frequency Designation | Y1 | Y2 | Y3 | Y4 | Y5 | Y6 | Y7 | Y8 |
|---------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Frequency Range (MHz) | 1710-2690 | 1710-2690 | 1710-2690 | 1710-2690 | 3300-3800 | 3300-3800 | 3300-3800 | 3300-3800 |
| Polarisation | Xpol | Xpol | Xpol | Xpol | Xpol | Xpol | Xpol | Xpol |
| Horizontal Beamwidth | 65° | 65° | 65° | 65° | 65° | 65° | 65° | 65° |
| Electrical Downtilt Range | 2-20° | 2-20° | 2-20° | 2-20° | 2-12° | 2-12° | 2-12° | 2-12° |
| Connector Type | (2x) 4.3/10 Female | (2x) 4.3/10 Female | (2x) 4.3/10 Female | (2x) 4.3/10 Female | (2x) 4.3/10 Female | (2x) 4.3/10 Female | (2x) 4.3/10 Female | (2x) 4.3/10 Female |

| ELECTRICAL CHARACTERISTICS | Y1 | | | |
|--|---------------|---------------|---------------|---------------|
| Frequency Bands | 1695-2690 MHz | | | |
| | 1710-1990 MHz | 1920-2200 MHz | 2200-2490 MHz | 2490-2690 MHz |
| Gain (0°) | 14.5 dBi | 15.2 dBi | 15.8 dBi | 16.2 dBi |
| Input Impedance | 50Ω | | | |
| VSWR | < 1.5:1 | | | |
| Polarisation | ±45° | | | |
| Horizontal Beamwidth (-3 dB) | 65° | 65° | 65° | 65° |
| Vertical Beamwidth (-3 dB) | 13° | 12° | 11° | 10° |
| Electrical Downtilt Range | 2-20° | | | |
| Port to Port Isolation | ≥ 30 dB | | | |
| First Upper Sidelobe Suppression | ≥ 16 dB | ≥ 16 dB | ≥ 16 dB | ≥ 16 dB |
| Front-to-Back Ratio @ 180° ±30° | > 25 dB | > 25 dB | > 25 dB | > 25 dB |
| Cross Polar Ratio - Main Direction | > 15 dB | > 15 dB | > 15 dB | > 15 dB |
| Maximum Power (Per Port) | 250 W | | | |
| Intermodulation 3rd Order for 2 x 20W Carriers | < -110 dBm | | | |



Several patents pending regarding this product. Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, 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 products may be made without notice.

1710-2690 | 1710-2690 | 1710-2690 | 1710-2690 | 3300-3800 | 3300-3800 | 3300-3800 | 3300-3800 MHz

8838108N

8Xpol | 65° Az | 16.2/16.2/16.2/16.2/19.5/19.5/19.5/19.5 dBi | 2-20°/2-20°/2-20°/2-20°/2-12°/2-12°/2-12°/2-12° | 1938 mm

| ELECTRICAL CHARACTERISTICS | Y2 | | | |
|--|---------------|---------------|---------------|---------------|
| | 1695-2690 MHz | | | |
| Frequency Bands | 1710-1990 MHz | 1920-2200 MHz | 2200-2490 MHz | 2490-2690 MHz |
| Gain (0°) | 14.5 dBi | 15.2 dBi | 15.8 dBi | 16.2 dBi |
| Input Impedance | 50Ω | | | |
| VSWR | < 1.5:1 | | | |
| Polarisation | ±45° | | | |
| Horizontal Beamwidth (-3 dB) | 65° | 65° | 65° | 65° |
| Vertical Beamwidth (-3 dB) | 13° | 12° | 11° | 10° |
| Electrical Downtilt Range | 2-20° | | | |
| Port to Port Isolation | ≥ 30 dB | | | |
| First Upper Sidelobe Suppression | ≥ 16 dB | ≥ 16 dB | ≥ 16 dB | ≥ 16 dB |
| Front-to-Back Ratio @ 180° ±30° | > 25 dB | > 25 dB | > 25 dB | > 25 dB |
| Cross Polar Ratio - Main Direction | > 15 dB | > 15 dB | > 15 dB | > 15 dB |
| Maximum Power (Per Port) | 250 W | | | |
| Intermodulation 3rd Order for 2 x 20W Carriers | < -110 dBm | | | |

| ELECTRICAL CHARACTERISTICS | Y3 | | | |
|--|---------------|---------------|---------------|---------------|
| | 1695-2690 MHz | | | |
| Frequency Bands | 1710-1990 MHz | 1920-2200 MHz | 2200-2490 MHz | 2490-2690 MHz |
| Gain (0°) | 14.5 dBi | 15.2 dBi | 15.8 dBi | 16.2 dBi |
| Input Impedance | 50Ω | | | |
| VSWR | < 1.5:1 | | | |
| Polarisation | ±45° | | | |
| Horizontal Beamwidth (-3 dB) | 65° | 65° | 65° | 65° |
| Vertical Beamwidth (-3 dB) | 13° | 12° | 11° | 10° |
| Electrical Downtilt Range | 2-20° | | | |
| Port to Port Isolation | ≥ 30 dB | | | |
| First Upper Sidelobe Suppression | ≥ 16 dB | ≥ 16 dB | ≥ 16 dB | ≥ 16 dB |
| Front-to-Back Ratio @ 180° ±30° | > 25 dB | > 25 dB | > 25 dB | > 25 dB |
| Cross Polar Ratio - Main Direction | > 15 dB | > 15 dB | > 15 dB | > 15 dB |
| Maximum Power (Per Port) | 250 W | | | |
| Intermodulation 3rd Order for 2 x 20W Carriers | < -110 dBm | | | |

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1710-2690 | 1710-2690 | 1710-2690 | 1710-2690 | 3300-3800 | 3300-3800 | 3300-3800 | 3300-3800 MHz

8838108N

8Xpol | 65° Az | 16.2/16.2/16.2/16.2/19.5/19.5/19.5/19.5 dBi | 2-20°/2-20°/2-20°/2-20°/2-12°/2-12°/2-12°/2-12° | 1938 mm

| ELECTRICAL CHARACTERISTICS | Y4 | | | |
|--|---------------|---------------|---------------|---------------|
| Frequency Bands | 1695-2690 MHz | | | |
| | 1710-1990 MHz | 1920-2200 MHz | 2200-2490 MHz | 2490-2690 MHz |
| Gain (0°) | 14.5 dBi | 15.2 dBi | 15.8 dBi | 16.2 dBi |
| Input Impedance | 50Ω | | | |
| VSWR | < 1.5:1 | | | |
| Polarisation | ±45° | | | |
| Horizontal Beamwidth (-3 dB) | 65° | 65° | 65° | 65° |
| Vertical Beamwidth (-3 dB) | 13° | 12° | 11° | 10° |
| Electrical Downtilt Range | 2-20° | | | |
| Port to Port Isolation | ≥ 30 dB | | | |
| First Upper Sidelobe Suppression | ≥ 16 dB | ≥ 16 dB | ≥ 16 dB | ≥ 16 dB |
| Front-to-Back Ratio @ 180° ±30° | > 25 dB | > 25 dB | > 25 dB | > 25 dB |
| Cross Polar Ratio - Main Direction | > 15 dB | > 15 dB | > 15 dB | > 15 dB |
| Maximum Power (Per Port) | 250 W | | | |
| Intermodulation 3rd Order for 2 x 20W Carriers | < -110 dBm | | | |

| ELECTRICAL CHARACTERISTICS | Y5 | |
|--|---------------|---------------|
| Frequency Bands | 3300-3800 MHz | |
| | 3300-3590 MHz | 3590-3800 MHz |
| Gain (0°) | 18.5 dBi | 19.5 dBi |
| Input Impedance | 50Ω | |
| VSWR | < 1.5:1 | |
| Polarisation | ±45° | |
| Horizontal Beamwidth (-3 dB) | 65° | 65° |
| Vertical Beamwidth (-3 dB) | 6.1° | 5.2° |
| Electrical Downtilt Range | 2-12° | |
| Port to Port Isolation | ≥ 30 dB | |
| First Upper Sidelobe Suppression | ≥ 16 dB | ≥ 16 dB |
| Front-to-Back Ratio @ 180° ±30° | > 25 dB | > 25 dB |
| Cross Polar Ratio - Main Direction | > 15 dB | > 15 dB |
| Maximum Power (Per Port) | 250 W | |
| Intermodulation 3rd Order for 2 x 20W Carriers | < -110 dBm | |

Several patents pending regarding this product. Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, 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 products may be made without notice.

1710-2690 | 1710-2690 | 1710-2690 | 1710-2690 | 3300-3800 | 3300-3800 | 3300-3800 | 3300-3800 MHz

8838108N

8Xpol | 65° Az | 16.2/16.2/16.2/16.2/19.5/19.5/19.5/19.5 dBi | 2-20°/2-20°/2-20°/2-20°/2-12°/2-12°/2-12°/2-12° | 1938 mm

| ELECTRICAL CHARACTERISTICS | Y6 | |
|---|---------------|---------------|
| Frequency Bands | 3300-3800 MHz | |
| | 3300-3590 MHz | 3590-3800 MHz |
| Gain (0°) | 18.5 dBi | 19.5 dBi |
| Input Impedance | 50Ω | |
| VSWR | < 1.5:1 | |
| Polarisation | ±45° | |
| Horizontal Beamwidth (-3 dB) | 65° | 65° |
| Vertical Beamwidth (-3 dB) | 6.1° | 5.2° |
| Electrical Downtilt Range | 2-12° | |
| Port to Port Isolation | ≥ 30 dB | |
| First Upper Sidelobe Suppression | ≥ 16 dB | ≥ 16 dB |
| Front-to-Back Ratio @ 180° ±30° | > 25 dB | > 25 dB |
| Cross Polar Ratio - Main Direction | > 15 dB | > 15 dB |
| Maximum Power (Per Port) | 250 W | |
| Intermodulation 3rd Order for 2 x 20W Carriers | < -110 dBm | |

| ELECTRICAL CHARACTERISTICS | Y7 | |
|---|---------------|---------------|
| Frequency Bands | 3300-3800 MHz | |
| | 3300-3590 MHz | 3590-3800 MHz |
| Gain (0°) | 18.5 dBi | 19.5 dBi |
| Input Impedance | 50Ω | |
| VSWR | < 1.5:1 | |
| Polarisation | ±45° | |
| Horizontal Beamwidth (-3 dB) | 65° | 65° |
| Vertical Beamwidth (-3 dB) | 6.1° | 5.2° |
| Electrical Downtilt Range | 2-12° | |
| Port to Port Isolation | ≥ 30 dB | |
| First Upper Sidelobe Suppression | ≥ 16 dB | ≥ 16 dB |
| Front-to-Back Ratio @ 180° ±30° | > 25 dB | > 25 dB |
| Cross Polar Ratio - Main Direction | > 15 dB | > 15 dB |
| Maximum Power (Per Port) | 250 W | |
| Intermodulation 3rd Order for 2 x 20W Carriers | < -110 dBm | |

Several patents pending regarding this product. Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, 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 products may be made without notice.

1710-2690 | 1710-2690 | 1710-2690 | 1710-2690 | 3300-3800 | 3300-3800 | 3300-3800 | 3300-3800 MHz

8838108N

8Xpol | 65° Az | 16.2/16.2/16.2/16.2/19.5/19.5/19.5/19.5 dBi | 2-20°/2-20°/2-20°/2-20°/2-12°/2-12°/2-12°/2-12° | 1938 mm

| ELECTRICAL CHARACTERISTICS | Y8 | |
|---|---------------|---------------|
| Frequency Bands | 3300-3800 MHz | |
| | 3300-3590 MHz | 3590-3800 MHz |
| Gain (0°) | 18.5 dBi | 19.5 dBi |
| Input Impedance | 50Ω | |
| VSWR | < 1.5:1 | |
| Polarisation | ±45° | |
| Horizontal Beamwidth (-3 dB) | 65° | 65° |
| Vertical Beamwidth (-3 dB) | 6.1° | 5.2° |
| Electrical Downtilt Range | 2-12° | |
| Port to Port Isolation | ≥ 30 dB | |
| First Upper Sidelobe Suppression | ≥ 16 dB | ≥ 16 dB |
| Front-to-Back Ratio @ 180° ±30° | > 25 dB | > 25 dB |
| Cross Polar Ratio - Main Direction | > 15 dB | > 15 dB |
| Maximum Power (Per Port) | 250 W | |
| Intermodulation 3rd Order for 2 x 20W Carriers | < -110 dBm | |

| ELECTRICAL DOWNTILT CONTROL | |
|-------------------------------|----------|
| Internal RCU Interface | AISG 2.0 |
| RET AISG Connector Protection | IP67 |

| ENVIRONMENTAL CHARACTERISTICS | PACKAGING |
|-------------------------------|------------------------------|
| Operating Temperature Range | -40° C to +60° C |
| Lightning Protection | DC Ground |
| Relative Humidity | 0 to 95% |
| Rain rate | 0-140 mm/hr |
| Enclosure Protection | Equal to or better than IP55 |
| RF Connector Protection | IP67 |

2238 x 500 x 160 mm

| MECHANICAL CHARACTERISTICS | |
|----------------------------|--|
| Dimensions (see drawing) | Height: 1938 mm Width: 443 mm Depth: 60 mm |
| Weight | 20.5 kg (excluding mounting accessory) |
| Shroud Material | FRP |
| Reflector Material | Aluminum Alloy |
| Wind Speed | 180 km/hr |

| MOUNTING KIT OPTIONS | POLE DIAMETER | MECHANICAL TILT |
|--|----------------|-----------------|
| Mounting & Downtilt Brackets for pole (included) | Ø50 to Ø115 mm | 0-12° |

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