

P6ODMU01

4-Port, 65 Degree, Base Station Sector Antenna

Kaelus Next Generation Base Station Antennas

- High gain over an extended tilt range
- Fully integrated Remote Electrical Tilt, AISG compatible
- Supports MIMO: 4x4 on Mid Band
- Electrical specifications as per NGMN P-BASTA version 12.0



| GENERAL | MB Y1/Y2 |
|-------------------------------|-----------|
| Frequency Range | 1695-2690 |
| Gain Over All Tilts [dBi] | 18.7 |
| Polarization | X |
| Azimuth Beamwidth [°] | 65 |
| Electrical Downtilt Range [°] | 2-12 |
| Ports Per Band | 4 |

Specifications and Layouts

| MECHANICAL SPECIFICATIONS | |
|--|------------------------------|
| Antenna Dimensions: Length, Width, Depth [inch mm] | 71.7x11.8x5.7 1820x300x146 |
| Net Weight (Antenna) [lbs kg] | 46 21 |
| Connector Type | 4.3-10 Female |
| Connector Quantity | 4 |
| Connector Position | Bottom |
| Windload, Calculation [mph km/h] | 150 241 |
| Windload, Frontal [lbf N] | 93 414 |
| Windload, Lateral [lbf N] | 37 164 |
| Survival Wind Speed [mph km/h] | 150 241 |
| Radome Material | GRP |
| Radome Color [RAL] | 7035 (Light Gray) |
| Product Environmental Compliance | RoHS |
| Lightning Protection | Yes - DC Ground |

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| ELECTRICAL SPECIFICATIONS | | MB Y1/Y2 | | | |
|--|----------|-----------|-----------|-----------|-----------|
| Frequency Range [MHz] | | 1695-1880 | 1850-1990 | 1920-2200 | 2496-2690 |
| Gain, Average [dBi] | Min Tilt | 18.1 | 18.4 | 18.7 | 19.5 |
| | Mid Tilt | 18.3 | 18.6 | 18.8 | 19.6 |
| | Max Tilt | 17.9 | 18.5 | 18.6 | 19.4 |
| Gain, Over All Tilts [dBi] | | 18.1 ±0.5 | 18.4 ±0.5 | 18.7 ±0.5 | 19.5 ±0.5 |
| Azimuth Beamwidth [°] | | 66.2 ±3.9 | 65.8 ±4.1 | 64.5 ±2.5 | 52.5 ±6.1 |
| Elevation Beamwidth [°] | | 5.9 ±0.5 | 5.5 ±0.3 | 5.3 ±0.4 | 4.1 ±0.3 |
| Electrical Downtilt [°] | | 2x 2-12 | | | |
| Elevation Downtilt Deviation [°] | | 0.5 | 0.5 | 0.5 | 0.5 |
| Front-to-Back Ratio, Total Power, ±30° [dB] | | 23 | 23 | 23 | 23 |
| Front-to-Back Ratio at 180° Copolar [dB] | | 30 | 34 | 36 | 36 |
| First Upper Side Lobe Suppression [dB] | | 21 | 21 | 19 | 19 |
| Upper Side Lobe Suppression [dB] | | 19 | 19 | 18 | 18 |
| Cross Polar Over Sector [dB] | | 14 | 14 | 14 | 12 |
| Cross Polar Discrimination at Boresight [dB] | | 29 | 28 | 24 | 23 |
| Polarization [°] | | ±45 | | | |
| Impedance [Ω] | | 50 | | | |
| VSWR | | < 1.5:1 | | | |
| Return Loss [dB] | | > 14.0 | | | |
| Cross Polar Isolation [dB] | | 30 | | | |
| Passive Intermodulation (PIM) 3rd order, 2x40W [dBc] | | < -153 | | | |
| Maximum Effective Power Per Port [W] | | 250 | | | |

Network planning files and datasheet in NGMN XML formats are available on request by email.

Kaelus follows the definitions and recommendations per NGMN P-Basta version 12.0 (www.ngmn.org) within parameters shown on this datasheet.

All specifications are subject to change without notice. Visit www.kaelus.com for the most current data sheets.



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| REMOTE ELECTRICAL TILT (RET) INFORMATION | |
|--|---------------------------|
| Type | Integrated, Non-Removable |
| Power Input | 10 - 30V DC |
| Protocol | 3GPP/AISG2.0 |
| RET Interface | 8-Pin DIN |
| RET Interface (Quantity) | 2 (1 Male + 1 Female) |

| PRODUCT VARIANT | |
|---------------------|-------------|
| Single RET Firmware | P6ODMU01-V1 |

| SHIPPING AND ORDER INFORMATION | | |
|--|-------------------------------|----------------|
| Packing Size: Length, Width, Depth [inch mm] | 81.5x16.1x10.1 2070x410x256 | |
| Tilt Bracket: Shipping Weight [lbs kg], P/N | 57.2 26.0 | P6ODMU01-V1-P3 |

| ENVIRONMENTAL COMPLIANCE | |
|--|------------|
| ETSI EN300019-1-1 for Storage | Class 1.2 |
| ETSI EN300019-1-2 for Transportation | Class 2.3 |
| ETSI EN300019-1-4 for Environmental Conditions | Class 4.1E |
| Cold Temperature Survival [°F °C] | -40 -40 |
| Hot Temperature Survival [°F °C] | 140 60 |