

P6BTMU01

6-Port, 65 Degree, Base Station Sector Antenna

Kaelus Next Generation Base Station Antennas

- Innovative slotted disc antenna technology
- High gain over an extended tilt range
- Fully integrated Remote Electrical Tilt, AISG compatible
- Supports MIMO: 2x2 on Low Band and 4x4 on Mid Band
- Electrical specifications as per NGMN P-BASTA version 11.1

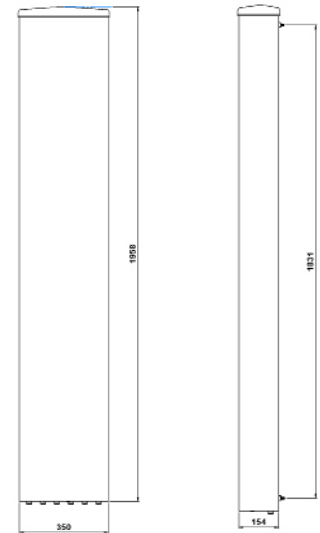
| GENERAL (BASTA) | LB R1 | MB Y1 | MB Y2 |
|-------------------------------|---------|-----------|-----------|
| Frequency Range | 694-960 | 1695-2690 | 1695-2690 |
| Gain Over All Tilts [dBi] | 16.1 | 18.0 | 18.0 |
| Polarization | X | X | X |
| Azimuth Beamwidth [°] | 65 | 65 | 65 |
| Electrical Downtilt Range [°] | 2-12 | 2-12 | 2-12 |
| Ports Per Band | 2 | 2 | 2 |



Specifications and Layouts

| MECHANICAL SPECIFICATIONS | |
|---|------------------------------|
| Antenna Dimensions: Length, Width, Depth [inch mm] | 77x13.77x6.06 1958x350x154 |
| Net Weight (Antenna) [lbs kg] | 55 25.0 |
| Connector Type | 4.3-10 Female |
| Connector Quantity | 6 |
| Connector Position | Bottom |
| Windload, Calculation* [mph km/h] | 93.2 150 |
| Windload, Frontal [lbf N] | 179 798 |
| Windload, Lateral [lbf N] | 31 139 |
| Survival Wind Speed [km/h] | 200 |
| Radome Material | GRP |
| Radome Color [RAL] | 7035 (Light Gray) |
| Product Environmental Compliance | RoHS |
| Mech Distance Between Mounting Points - Antenna [inch mm] | 72 1831 |
| Lightning Protection | DC Ground |

* According to EN 1991-1-4:2005+A 1:2010



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| ELECTRICAL SPECIFICATION (BASTA) | LB R1 | | | MB Y1/Y2 | | | | | |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------|
| Frequency Range [MHz] | 694-790 | 790-862 | 880-960 | 1695-1880 | 1900-2025 | 2110-2170 | 2300-2500 | 2500-2690 | |
| Gain, Average [dBi] | Min Tilt | 15.8 | 16.0 | 16.5 | 17.2 | 17.5 | 17.8 | 18.1 | 18.3 |
| | Mid Tilt | 16.0 | 16.2 | 16.7 | 17.4 | 17.7 | 18.0 | 18.3 | 18.5 |
| | Max Tilt | 15.8 | 16.0 | 16.5 | 17.2 | 17.5 | 17.8 | 18.1 | 18.1 |
| Gain, Over All Tilts [dBi] | 15.9 ±0.5 | 16.1 ±0.5 | 16.6 ±0.5 | 17.3 ±0.5 | 17.6 ±0.5 | 18.0 ±0.5 | 18.2 ±0.5 | 18.3 ±0.5 | |
| Azimuth Beamwidth [°] | 69.0 ±3.0 | 66.0 ±3.0 | 63.0 ±2.0 | 69.0 ±5.0 | 65.0 ±5.0 | 65.0 ±5.0 | 62.0 ±5.0 | 60.0 ±5.0 | |
| Elevation Beamwidth [°] | 12.0 ±1.0 | 10.8 ±0.6 | 9.4 ±0.6 | 5.5 ±0.5 | 5.2 ±0.5 | 5.0 ±0.5 | 4.7 ±0.5 | 4.5 ±0.5 | |
| Electrical Downtilt [°] | 2-12 | | | 2x 2-12 | | | | | |
| Elevation Downtilt Deviation [°] | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | |
| Front-to-Back Ratio, Total Power, ±30° [dB] | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | |
| First Upper Side Lobe Suppression [dB] | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | |
| Upper Side Lobe Suppression [dB] | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 10 | |
| Polarization [°]f | ±45 | | | ±45 | | | | | |
| Impedance [Ω] | 50 | | | 50 | | | | | |
| VSWR | < 1.5:1 | | | < 1.5:1 | | | | | |
| Return Loss [dB] | < -14.0 | | | < -14.0 | | | | | |
| Cross Polar Isolation [dB] | 30 | | | 30 | | | | | |
| Interband Isolation [dB] | 35 | | | 35 | | | | | |
| Passive Intermodulation (PIM) 3rd order, 2x20W [dBc] | < -153 | | | < -153 | | | | | |
| Maximum Effective Power Per Port [W] | 350 | | | 350 | | | | | |

| PRODUCT VARIANT | |
|-----------------------------------|-------------|
| Single RET Firmware Configuration | P6BTMU01-V1 |
| Multi RET Firmware Configuration | P6BTMU01-V2 |

| SHIPPING AND ORDER INFORMATION | |
|--|----------------------------------|
| Packing Size: Length, Width, Depth [inch mm] | 89.76x19.68x11.81 2280x500x300 |
| No Bracket: Shipping Weight [lbs kg], P/N | 64 29 P6BTMU01-Vx-P1 |
| Fixed Bracket: Shipping Weight [lbs kg], P/N | 68 31 P6BTMU01-Vx-P2 |
| Tilt Bracket: Shipping Weight [lbs kg], P/N | 75 34 P6BTMU01-Vx-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 |

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 11.1 (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.

