

# S6IDEU01

4 Port - 65deg Base Station Sector Antenna  
with transparency for 3.5GHz

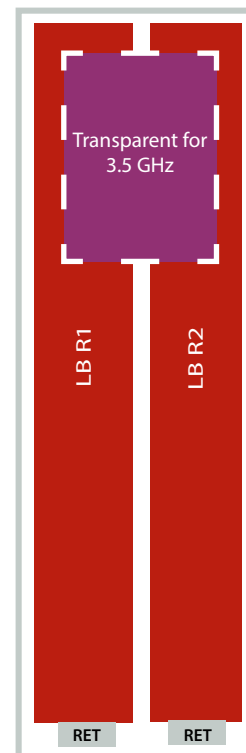
## Kaelus Next Generation Base Station Antennas

- Transparent for 3300-4000MHz radios
- Fully integrated Remote Electrical Tilt, AISG compatible
- Supports MIMO: 4x4 on Low Band and Mid Band
- Electrical specifications as per NGMN P-BASTA version 12.0
- Available with integrated SBT

| GENERAL (BASTA)               | LB R1/R2 |
|-------------------------------|----------|
| Frequency Range               | 694-960  |
| Gain Over All Tilts [dBi]     | 16.0     |
| 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]         | 106.5x19.6x8.6   2705x498x217 |
| Net Weight (Antenna) [lbs kg]                              | 81.4   37.0                   |
| Connector Type, R1,R2                                      | 4.3-10 Female                 |
| Connector Quantity, R1,R2                                  | 4                             |
| Connector Position   | Bottom                        |
| Windload, Calculation [mph km/h]                           | 93.2   150                    |
| Windload, Frontal [lbf N]                                  | 223   991                     |
| Windload, Lateral [lbf N]                                  | 79   349                      |
| Survival Wind Speed [mph km/h]                             | 124.3   200                   |
| Radome Material  | ASA                           |
| Radome Colour [RAL]  | 7035 (Light Gray)             |
| Product Environmental Compliance                           | RoHS                          |
| Mech. distance between mounting points - Antenna [inch mm] | 101.6   2580                  |
| Lightning Protection                                       | Yes - DC Ground               |



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| ELECTRICAL SPECIFICATIONS (BASTA)                    | LB R1/R2        |            |            |      |
|--|-----------------|------------|------------|------|
| Frequency Range [MHz]                                | 703-788         | 814-890    | 890-960    |      |
| Gain, Average [dBi]                                  | Min Tilt        | 15.6       | 16.2       | 16.5 |
|  | Mid Tilt        | 15.6       | 16.0       | 16.3 |
|  | Max Tilt        | 15.0       | 14.5       | 15.0 |
| Gain, Over All Tilts [dBi]                           | 15.5 ±0.5       | 15.7 ±0.5  | 16.0 ±0.5  |      |
| Azimuth Beamwidth [°]                                | 69.0 ±10.0      | 62.0 ±11.0 | 55.0 ±10.0 |      |
| Elevation Beamwidth [°]                              | 134.0 ±6.0      | 141.0 ±6.0 | 130.0 ±6.0 |      |
| Electrical Downtilt [°]                              | 7.8 ±0.6        | 7.1 ±1.0   | 6.5 ±0.5   |      |
| Elevation Downtilt Deviation [°]                     | 0.5             | 0.5        | 0.5        |      |
| Front-to-Back Ratio, Total Power, ±30° [dB]          | 17              | 18         | 18         |      |
| First Upper Side Lobe Suppression [dB]               | 16              | 15         | 15         |      |
| Upper Side Lobe Suppression [dB]                     | 16              | 8          | 8          |      |
| Polarization [°]                                     | ±45             |            |            |      |
| Impedance [Ω]  | 50              |            |            |      |
| VSWR   | < 1.5:1         |            |            |      |
| Return Loss [dB]                                     | > 14.0          |            |            |      |
| Cross Polar Isolation [dB]                           | 25 (Typical 28) |            |            |      |
| Interband Isolation [dB]                             | 25              |            |            |      |
| Passive Intermodulation (PIM) 3rd order, 2x20W [dBc] | < -153          |            |            |      |
| Maximum Effective Power Per Port [W]                 | 250             |            |            |      |

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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 Configuration | S6IDEU01-V1 |
| Multi RET Firmware Configuration  | S6IDEU01-V2 |
| Single RET Firmware, SBT on R1    | S6IDEU01-V3 |

| SHIPPING AND ORDER INFORMATION               |                                |                |
|--|--------------------------------|----------------|
| Packing Size: Length, Width, Depth [inch mm] | 114.2x23.6x11.8   2900x600x300 |                |
| Fixed Bracket: Shipping Weight [lbs kg], P/N | 135   61                       | S6IDEU01-Vx-P2 |
| Tilt Bracket: Shipping Weight [lbs kg], P/N  | 154   70                       | S6IDEU01-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 Condi- | 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 12.0 ([www.ngmn.org](http://www.ngmn.org)) within parameters shown on this datasheet.

All specifications are subject to change without notice. Visit [www.kaelus.com](http://www.kaelus.com) for the most current data sheets.

