



RFS Microwave Antennas are designed for microwave systems in all common frequency ranges from 4 GHz to 15 GHz. Different options of survival windspeeds are available. This allows the use of antennas in areas where extreme wind conditions are normal. The antennas utilise a conventional feed system and are available in three performance classes offering complete flexibility when designing a network. Ultra High Performance antennas are the optimum choice for systems where a high level of pattern performance is required because of high local radio congestion. These antennas are required for use in networks where there is a very high interference potential. Antennas are available in 6 ft (1.8m) to 12 ft (3.7m) diameters. The Ultra High Performance antennas are available in dual polarised (UDA) as well as in single polarised versions (UA). All antennas include a flexible radome to minimise its impact on the antenna's electrical characteristics.



Antenna

**FEATURES / BENEFITS**

- Field-proven reliability and long life
- Support for winds up to 200 km/h (125 mph) with high-wind versions that support winds up to 252 km/h (155 mph) and an optional sway bar for added assurance in case mistakes are made during installation
- A single-piece configuration and compact packaging to reduce transportation costs
- Frequencies ranging from 4 GHz to 15 GHz with support for two wideband frequency ranges (5.725-6.875 and 7.125-8.5 GHz) to reduce antenna requirements and simplify logistics

**Technical features**

**GENERAL SPECIFICATIONS**

|                      |  |                         |
|----------------------|--|-------------------------|
| <b>Product Type</b>  |  | Point to point antennas |
| <b>Profile</b>       |  | TrunkLine               |
| <b>Performance</b>   |  | Ultra High              |
| <b>Polarization</b>  |  | Single                  |
| <b>Antenna Input</b> |  | PDR 120                 |
| <b>Reflector</b>     |  | 1-part                  |
| <b>Radome</b>        |  | flexible                |
| <b>Antenna color</b> |  | White RAL 9010          |
| <b>Swaybar</b>       |  | 1: (3.0 m x Ø60 mm)     |

**ELECTRICAL SPECIFICATIONS**

|                              |           |   |
|------------------------------|-----------|---|
| <b>Frequency</b>             | GHz       | 12.7 - 13.25                                      |
| <b>3dB beamwidth</b>         | degrees   | 0.7   |
| <b>Low Band Gain</b>         | dBi       | 47.6  |
| <b>Mid Band Gain</b>         | dBi       | 47.7  |
| <b>High Band Gain</b>        | dBi       | 47.9  |
| <b>F/B Ratio</b>             | dB        | 74  |
| <b>XPD</b>                   | dB        | 30  |
| <b>Max VSWR / R L</b>        | VSWR / dB | 1.08 (28.3)                                       |
| <b>Regulatory Compliance</b> |           | ETSI EN 302217 Range 1, class 3<br>FCC Category A |



**MECHANICAL SPECIFICATIONS**

|                                |            |           |
|--------------------------------|------------|-----------|
| Diameter                       | ft (m)     | 8 (2.4)   |
| Elevation Adjustment           | degrees    | ± 5       |
| Azimuth Adjustment             | degrees    | ± 5       |
| Polarization Adjustment        | degrees    | ± 5       |
| Mounting Pipe Diameter minimum | mm (in)    | 114 (4.5) |
| Mounting Pipe Diameter maximum | mm (in)    | 114 (4.5) |
| Approximate Weight             | kg (lb)    | 180 (396) |
| Survival Windspeed             | km/h (mph) | 200 (125) |
| Operational Windspeed          | km/h (mph) | 190 (118) |

**STRUCTURE**

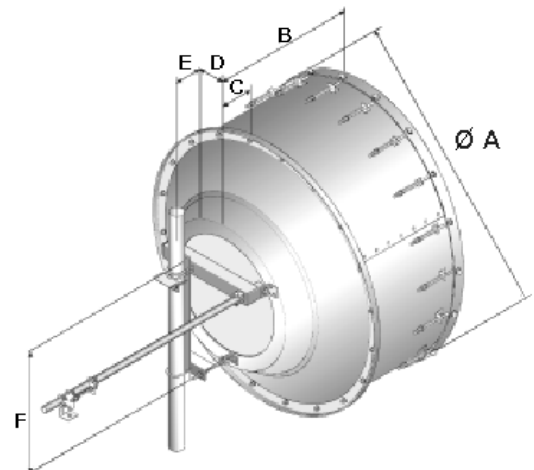
|                 |                   |
|-----------------|-------------------|
| Radome Material | PVC coated fabric |
|-----------------|-------------------|

**FURTHER ACCESSORIES**

|                     |  |
|---------------------|--|
| optional Swaybar    | 1: SMA-SK-60-3000A (3.0 m x Ø60 mm)  |
| Further Accessories | SMA-WK-8 : Wind Kit<br>SMA-SKO-UNIVERSAL-L : Universal sway bar fixation kit |

**MOUNTOUTLINE**

|                             |         |              |
|-----------------------------|---------|--------------|
| Dimension_A                 | mm (in) | 2616 (103.4) |
| Dimension_B                 | mm (in) | 1450 (57.1)  |
| Dimension_C                 | mm (in) | 460 (18.1)   |
| Dim_D-<br>114mm(4.5_in)Pipe | mm (in) | 190 (7.5)    |
| Dimension_E                 | mm (in) | 310 (12.3)   |
| Dimension_F                 | mm (in) | 1120 (44.1)  |





**WINDLOAD**

|  |            |              |
|--|------------|--------------|
| <b>Fs Side force max. @ survival wind speed</b>          | N (lb)     | 6350 (1422)  |
| <b>M Torque maximum @ survival wind speed Nm (ft lb)</b> | Nm (lb ft) | 5960 (4400)  |
| <b>Fa Axial force max. @ survival wind speed</b>         | N (lb)     | 12380 (2773) |



**External Document Links**

- [Complete Antenna installation](#)
- [RPE \(IQ-Link format\)](#)
- [RPE \(PDF format\)](#)
- [RPE \(Pathloss format\)](#)

**Notes**