



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

| | | |
|---------------|--|-------------------------|
| Product Type | | Point to point antennas |
| Profile | | TrunkLine |
| Performance | | Ultra High |
| Polarization | | Dual |
| Antenna Input | | PBR 84 |
| Reflector | | 1-part |
| Radome | | flexible |
| Antenna color | | White RAL 9010 |
| Swaybar | | 1: (3.0 m x Ø60 mm) |

ELECTRICAL SPECIFICATIONS

| | | |
|-----------------------|-----------|---------------------------------|
| Frequency | GHz | 7.125 - 8.5 |
| 3dB beamwidth | degrees | 0.9 |
| Low Band Gain | dBi | 44.4 |
| Mid Band Gain | dBi | 45.1 |
| High Band Gain | dBi | 45.9 |
| F/B Ratio | dB | 73 |
| XPD | dB | 30 |
| IPI | dB | 35 |
| Max VSWR / R L | VSWR / dB | 1.1 (26.4) |
| Regulatory Compliance | | ETSI EN 302217 Range 1, class 3 |



MECHANICAL SPECIFICATIONS

| | | |
|--------------------------------|------------|-----------|
| Diameter | ft (m) | 10 (3) |
| 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) | 290 (638) |
| 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-10 : Wind Kit SMA-SKO-UNIVERSAL-L : Universal sway bar fixation kit |

MOUNTOUTLINE

| | | |
|-----------------------------|---------|--------------|
| Dimension_A | mm (in) | 3220 (126.8) |
| Dimension_B | mm (in) | 1640 (64.6) |
| Dimension_C | mm (in) | 550 (21.7) |
| Dim_D- 114mm(4.5_in)Pipe | mm (in) | 190 (7.5) |
| Dimension_E | mm (in) | 370 (14.6) |
| Dimension_F | mm (in) | 1440 (56.9) |





WINDLOAD

| | | |
|---|------------|--------------|
| F_s Side force max. @ survival wind speed | N (lb) | 9590 (2148) |
| M Torque maximum @ survival wind speed Nm (ft lb) | Nm (lb ft) | 10240 (7600) |
| F_a Axial force max. @ survival wind speed | N (lb) | 19370 (4340) |



External Document Links

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

Notes