



Microwave antenna UNI4-18

Antenna description

High Performance \varnothing 1.20 m antenna for ALCOMA point to point radiorelay links with holder for precise horizontal and vertical alignment.

General parameters

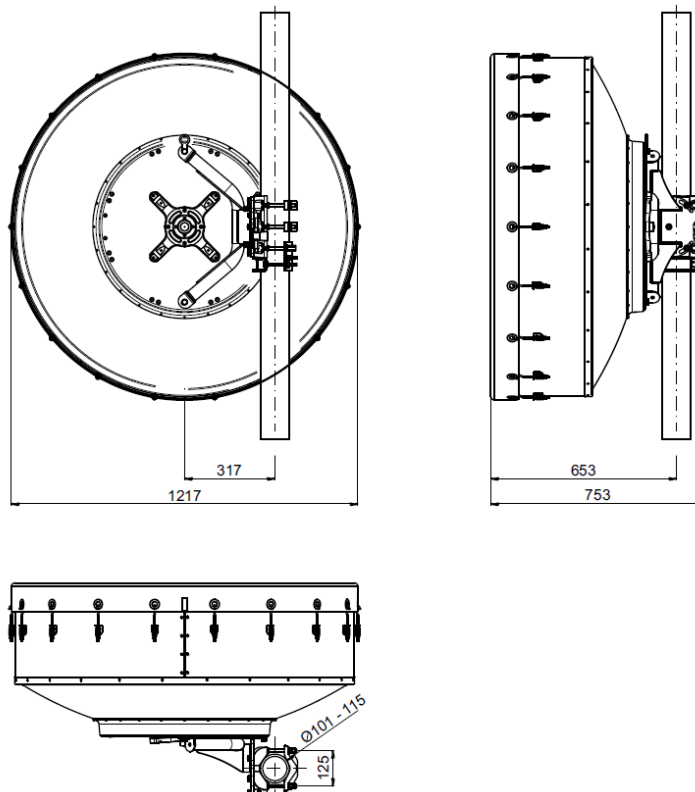
| | |
|--|---|
| Diameter | 1.20 m (4 ft.) |
| Feeder | single polarized (dual polarized) |
| Polarization | horizontal / vertical (dual) |
| Input flange: - standard - optional | circular, hole diameter 11.00 mm R220 (WR42) |
| Environmental temperature | -35 °C to +55 °C |
| Color | light grey |
| Radom material | white plastic canvas |

Electrical parameters

| | |
|-----------------------------------|-------------------------|
| Frequency band | 17.700 - 19.700 GHz |
| Gain: - low band | 44.2 dBi |
| - mid band | 44.7 dBi |
| - high band | 45.1 dBi |
| Beamwidth (-3 dB) | 1.0° (H / V) |
| Return loss | < 1.20 (20.0 dB) |
| Front to Back Ratio | 65 dB |
| Cross Polarization Discrimination | 32 dB |
| Antenna class | 2 (ETSI EN 302 217-4-2) |



UNI4-18



ALCOMA



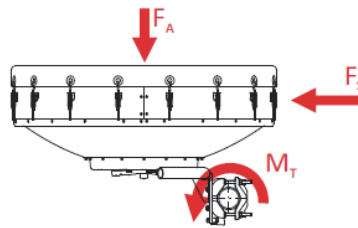
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Mechanical parameters due to wind

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| | |
|---|-----------------------|
| Performance stability | max 30 m/s (110 km/h) |
| Survival | max 55 m/s (200 km/h) |
| Radial ice load (density 7kN/m ³) | 25 mm |
| Net weight (interface A/R) | 34.5 kg |
| Pipe diameter* | 101 - 115 mm |
| Adjust azimuth / elevation | ±180° / — |
| Fine adjust azimuth | ±7° |
| Fine adjust elevation | ±15° |

Force and twisting moment due to wind



| | | |
|-------------------------|--------|---------|
| Wind velocity | 30 m/s | 55 m/s |
| F_A - axial force | 870 N | 2850 N |
| F_s - side force | 320 N | 1030 N |
| M_T - twisting moment | 350 Nm | 1150 Nm |
| Icing thickness 25 mm | 670 N | |