

# Ka Band 75cm Transmit Receive Antenna



## **RF performance** Azure Shine reflector with Newtec Ka-Band iLNB.

	Ka Band DV-75 Series
F/D	0.65
Operating frequency	TX : 27.00 – 31.00 GHz RX : 17.00 – 21.00 GHz
Gain ( $\pm 0.3$ dBi)	TX : 48.3 dBi @ 30.00 GHz RX : 44.9 dBi @ 20.20 GHz
3 dB beamwidth	TX : 0.75° @ 30.00 GHz RX : 0.97° @ 20.20 GHz
Sidelobe Envelope, TX Co-Pol dBi	
29-25log $\theta$ dBi	$100\lambda/D \leq \theta \leq 7^\circ$
8 dBi	$7^\circ < \theta \leq 9.2^\circ$
32-25log $\theta$ dBi	$9.2^\circ < \theta \leq 48^\circ$
-10 dBi	$48^\circ < \theta \leq 180^\circ$
Antenna Cross-Polarization within 1dB b/w	TX : > 25 dB RX : > 23 dB
VSWR	1.3 : 1 Max.
Certification	Eutelsat



## **Mechanical performance**

Material	Galvanized Steel
Antenna Optics	One-piece offset feed prime focus
Mount Type	Elevation over azimuth
Elevation Adjustment Range	0°- 90° continuous fine adjustment; fine adjustment accuracy $\leq 0.1$ degree
Azimuth Adjustment Range	360° Continuous; $\pm 3^\circ$ fine adjustment; fine adjustment accuracy $\leq 0.1$ degree
Mast Pipe Size	60mm OD (2.36 inch)
Wind Loading (Operational)	80 km/h
(Survival)	180 km/h
Temperature (Operational)	-40°C to 60°C
Rain (Operational)	10 mm/h
Atmospheric Conditions	Salt, Pollutants and Contaminants as encountered in coastal and industrial areas: 720 hours ASTM B117 salt spray
Humidity	0 to 100% with condensation

Please note that product designs and specifications are subject to refinement and may evolve from the descriptions provided.