



4.5m Ground Station Antenna GSA-450-M&L-xx-E

Temix GSA-450-M&L-xx-E 4.5m antenna is designed for worldwide transmit operations.

Features:

- Aluminum high precision main reflector.
- Subreflector and Corrugated Feedhorn precisely processed by numerically controlled machines.
- High efficiency.
- High precision and strength.



General Specification

Antenna Size & Type 4.5 meters, Dual Optic Gregorian
 Antenna feed 2/4 Ports Ku-band feed 2/4 Ports C-band feed (LP/CP)

	Receive	Transmit	Receive	Transmit
Frequency (GHz)	10.70-12.75	13.75-14.50	3.625-4.2	5.850-6.425
(optional)	10.70-12.75	13.75-14.80	3.4-4.2	5.850-6.625
Gain (typ midband)	52.9 dBi	54.5 dBi	43.4 dBi	47.3 dBi
Return Loss	18 dB typ Tx/Rx			
Insertion Loss	0.3 dB typ	0.25 dBtyp		
Tx/Rx Isolation	35 dB	85 dB with TRF		
(optional)	> 110dB Tx/Rx with additional TRF			
Feed Interface	WR75	WR75	CPR-229G	CPR-137G
XPD (1 dB Contour)		> 35 dB		> 30 dB
Axial Ratio				< 1.06
G/T	≥ 32.0 dB/K		≥ 24.4 dB/K	
Tx/Rx Sidelobe	Eutelsat & Intelsat Compliant (1st sidelobe -14dB)			
Noise Temperature	51 K @ 10° EL		50 K @ 10° EL	

Mechanical Specifications

Mount Type Elevation over Azimuth Pedestal
 Elevation Adjustment 0° to 90° Continuous
 Azimuth Adjustment +/-60° Continuous (opt. 2x100° sectors)
 Polarization Adjustment +/-110° Continuous

Drive Speed (Optional)

slew ≥ 0.2 °/s Az & El, ≥ 1 °/s Pol (optional)
 tracking ≥ 0.02 °/s Az & El

Environmental Specifications

Wind Loading Operational 72 km/h, Gusting to 97 km/h; Survival to 160 km/h
 Temperature -20° to 50°C (optional -32° to 65°C)
 Rain 1.3 cm /h
 Solar Radiation 360 BTU/h/ft² (1000 Kcal/h/m)²
 Operational Humidity 95% non-condensing

Main Features

- Excellent sidelobes characteristics
- 200km/h survival wind speed (High Wind option).
- Favorable withstanding erosion and rust capability as reflector's coat technics and the coat of all of steel parts to be processed by heating soak zinc.
- Advanced surface painting techniques enable the device with high anticorrosive and antirust capabilities.

*The Information included in this data sheet may be changed without advise. rev_01/18

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