



Size: 7.50m

## PFMA-750

### Performance & Durability

The PALS PFMA-750 is a high-performance antenna system engineered to meet or exceed stringent global standards. It features a highly efficient design with communication efficiency and it is ensuring superior gain, low sidelobes, and a high G/T ratio. Its robust construction utilizes hot-dip zinc processed steel parts for maximum corrosion resistance in harsh environments.

### Exceptional Flexibility in Band & Configuration

Designed for maximum versatility, the PFMA-750 supports a wide spectrum of frequency bands including C, Ku, Ka Bands customized L, S, QV bands options available. It offers flexible configurations (Rx/Tx or 2Rx/2Tx) and multiple structure types such as A+E and X-Y.

### Complete Turnkey Solution for Critical Missions

The antenna is delivered as a turnkey solution, ideal for TT&C, mobile deployments, and critical communications. It includes a full suite of optional accessories such as the antenna servo system, de-icing, BUCs, LNBs, modems and etc.

### Key Features

- C, Ku, Ka Bands are available
- Customized L, S, QV Band options are available
- High gain, High G/T
- Optional structure type variations A+E type, A+E-T type, X-Y type
- 2 port Rx/Tx version is available
- 3 Axes motorization kit is available
- Lightning Protection
- High-Accuracy GPS & Anti-Interference Electronic Compass
- Antenna colour option is available





GENERAL SPECIFICATIONS

Reflector Diameter
Antenna Type
Structure
Drive Mode

PFMA-750

7.5m
Cassegrain
LMC/FMC
Motorized

RF CHARACTERISTIC

Frequency (GHz) Tx
Frequency (GHz) Rx
Antenna Gain (±0.2 dBi) Tx
Antenna Gain (±0.2 dBi) Rx
Polarization
VSWR Tx
VSWR Rx
Axial ratio 2 port Tx (dB)
Axial ratio 2 port Rx (dB)
Axial ratio 4 port Tx (dB)
Axial ratio 4 port Rx (dB)
Feed Insertion Loss Tx (dB)
Feed Insertion Loss Rx (dB)
Antenna Noise Temperature 10°Elevation (K) Rx
Antenna Noise Temperature 20°Elevation (K) Rx
Antenna Noise Temperature 50°Elevation (K) Rx
Isolation Rx to Tx
Isolation Tx to Rx
Power Capacity (Tx)
CPI (On Axis, linear)
Radiation Pattern Compliance
Surface accuracy

C-Band

5.85~6.725
3.40~4.20
51.53@6.2 GHz
47.27@3.8 GHz
Circular/Linear
1.35:1
1.35:1
≤1.35dB
≤1.35dB
≤0.7
≤0.7
≤0.5dB
≤0.3
53
47
43
CPR-137G
CPR-229G
2KW
3dB
Compliant with MIL-STD-188-164A, ITU - RS-580 and ITU-RS-465-6
≤0.5mm

Ku-Band

13.75~14.80
10.70~12.75
58.72+20lg f/14.2 GHz
57.04+20lg f/11.7 GHz
Linear
1.35:1
1.35:1
≤1.35
≤1.35
≤0.75
≤0.75
≤0.5
≤0.3
63
52
45
WR-75
WR-75
2KW
3dB
Compliant with MIL-STD-188-164A, ITU - RS-580 and ITU-RS-465-6
≤0.5mm

Ka-Band

27.50~31GHz
17.70~21.20
64.93@29.0+GHz
61.25@19.0GHz
Circular
1.35:1
1.35:1
≤1.5
≤1.5
≤1
≤1
≤0.6
≤0.5dB
127
88
62
WR-28
WR-42
1KW
3dB
Compliant with MIL-STD-188-164A, ITU - RS-580 and ITU-RS-465-6
≤0.3mm

MECHANICAL SPECIFICATIONS

Antenna Travel Range
Antenna Travels

Azimuth

±70° (Limited) 0°~355° (Full Mot.)
± 200°

Elevation

10°~90°
10°~90°

Polarization

±90°
± 90°

ENVIRONMENTAL SPECIFICATIONS

Temperature Range
Wind Speed Operational
Wind Speed Survival
Humidity
Ice Load Operational
Ice Load Survival
Seismic capacity

PFMA-750

-30~50°C
72km/h
216km/h
100%
Icing 13mm
Icing 25mm
Horizontal: 0.3G; vertical: 0.1G

Specifications are subject to change.

