



ESER450KA2A

ANCHOR 4.5m Ka-Band Earth Station Antenna

Drive Mode: 2-Axis Motorized

of Ports: 2-ports

We recommend purchasing the corresponding Antenna Control System along with the **motorized** Earth Station, unless you plan to develop the control system yourself. Please note that the Antenna Control System is sold separately at an additional cost.

For Manual Structure Antennas, a control system is not required.



KEY SPECIFICATIONS

Band	Ka-Band
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ANTENNA SPECIFICATIONS

Antenna Aperture	4.5m
Antenna Drive Mode	2-axis motorized structure
Antenna Type	Ring Focus
Number Of Ports	2-ports
Polarization	Circular
Rx Axial Ratio 2 Ports	≤ 1.5 dB
Sidelobe	≤ -14 dB; $29 - 25 \log \theta (1^\circ \leq \theta < 20^\circ)$
Tx Axial Ratio 2 Ports	≤ 1.5 dB

RF SPECIFICATIONS

Noise Temperature Elevation 10°	125.94 K
Noise Temperature Elevation 20°	87.35 K
Noise Temperature Elevation 40°	61.53 K
Port Isolation Rx-tx	85 dB
Rx Feed Insertion Loss	0.6 dB
Rx Frequency	17.70 - 21.20 GHz
Rx Gain	57.49 dBi
Rx VSWR	1.35 : 1
Tx Feed Insertion Loss	0.6 dB
Tx Frequency	27.50 - 31.00 GHz
Tx Gain	61.16 dBi
Tx VSWR	1.35 : 1

ELECTRICAL SPECIFICATIONS

Power Capacity	2 KW
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INTERFACE SPECIFICATIONS

Rx Interface	WR-42
Tx Interface	WR-28

ENVIRONMENTAL SPECIFICATIONS

Humidity	1.0
Ice Load	Icing 13mm: normal work; Icing 25mm: no damage
Seismic Capacity Horizontal	0.3 G
Seismic Capacity Vertical	0.1 G
Temperature Operational	-20 - 50°C
Windspeed Operational	72 km/h
Windspeed Survival	216 km/h

PHYSICAL SPECIFICATIONS

Motion Range AZ	5° - 355° (turntable), +/- 75° (truss type)
Motion Range EL	5° - 90°
Motion Range POL	±90°
Product Package Volume	5 packages, dimension: 9.2 CBM
Product Weight	1200 kg
RMS	≤0.3 mm
Structure	LMC/ FMC
Unit Package Weight	1627 kg

LOGISTICS SPECIFICATIONS

HS Code	Country of Origin	Ex Works	ECCN Number	Unit Package
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HOW TO ORDER

EARTH STATION

ESES180KU2A

E SERIES

ANTENNA
STRUCTURE

BLANK: Manual Structure
A: 2-axis Motorized Structure
B: 3-axis Motorized Structure

OF PORTS

2: 2-ports
4: 4-ports

BAND

KA: Ka-Band
KU: Ku-Band

ANTENNA
APERTURE

180: 1.8m
240: 2.4m
370: 3.7m
450: 4.5m
620: 6.2m
730: 7.3m
900: 9.0m
1300: 13.0m

ANTENNA TYPE

C: Cassegrain
S: Single Offset
R: Ring Focus

MECHANICAL DIAGRAMS



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