

EASI 4.5 METER ANTENNA SPECIFICATIONS

ELECTRICAL

	C Band	Ku-Band
Operating Frequency (GHz):		
Transmit	5.850-6.425	14.0-14.5
Receive	3.625-4.2	10.95-12.75
Gain (Midband, Ref. Feed Horn):		
Transmit	46.8 dBi**	54.3 dBi****
Receive	43.5 dBi*	53.1 dBi****
Feed Insertion Loss (dB):		
DP - 2-Port RX/RX Linear:		
Receive	0.051 dB	0.10 dB
RT - 2-Port RX/TX Linear:		
Transmit	0.10 dB	0.10 dB
Receive	0.10 dB	0.12 dB
3PL - 3Port RX/TX Linear:		
Transmit	N/A	0.20 dB
Receive	N/A	0.20 dB
DPC – 2-Port RX Linear:		
Transmit	N/A	N/A
Receive	0.07 dB	N/A
VSWR:		
Transmit	1:3:1	1.3:1
Receive	1:3:1	1.3:1
Beamwidth (-3 dB):		
Transmit	0.83 degrees	0.34 degrees
Receive	1.10 degrees	0.41 degrees
First Sidelobe Level:	18.0 dB	18.0 dB
Radiation Pattern:	C and Ku band: Meets standards set by the FCC, INTELSAT, ASIASAT, EUTELSAT, ITU and others	
Antenna Noise Temp (Typical, Ref. Feed Horn):		
Elevation	C Band	Ku-Band
10 degrees	28K	36K
20 degrees	20K	27K
30 degrees	18K	25K
40 degrees	15K	24K
Power Handling Per TX Port:	5 kW (CW)	2kW (CW)
Cross Pol Isolation (on axis min.) (linear):		
Transmit	35 dB	35 dB
Receive	35 dB	35 dB
Feed Port Isolation (4-Port Linear):		
TX/RX	70 dB	70 dB
RX/RX and TX/TX	35 dB	35 dB

- * Referenced at 3.95 GHz
- ** Referenced at 11.95 GHz
- *** Referenced at 6.175 GHz
- **** Referenced at 14.25 GHz

MECHANICAL

Antenna Diameter:	4.5 meters
Antenna Type:	Prime Focus
Reflector Construction:	12 Panels, precision stretch-stamped steel
Antenna Travel:	Elevation: 0 to 90 degrees Azimuth: Manual 140 degrees Motorized: 130 degrees typical
Polarization Travel:	Feed Dependent
Antenna Travel Speed:	Drive System Dependent
Feed Interfaces:	Transmit C Band: CPR-137G Transmit Ku Band: WR-75 Receive C Band: CPR-229G Receive Ku Band: WR 75
Weights:	Kingpost: 1500 lbs. galvanized Reflector: 1200 lbs. galvanized
Shipping Info:	Kingpost shipped assembled on one pallet Reflector shipped on 2 pallets

ENVIRONMENTAL

Wind Loading: (Standard Actuators)	Operational: 45 mph, gusts to 60 mph Survival: 125 mph
Temperature Range :	-4.0° C to +65° C (-40° F to 150° F)
Atmospheric Conditions:	Pollutants, salt and corrosive contaminants as found in coastal and industrial areas

WINDLOADING

Front of Reflector @ 0 elevation	2006 lbs. based on ASCE 7-88 @ 60 mph Torque at base of kingpost @ 60 mph is 16,048 ft lbs. 8673 lbs. based on ASCE 7-88 @ 125 mph Torque at base of kingpost @ 125 mph is 69,384 ft lbs.
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Specifications and availability subject to change without notice
Reflector Specifications taken from Viasat 4.5 meter data sheet

EASI 4.5 METER ANTENNA FEATURES

REFLECTOR

12 galvanized steel and painted precision stretch-stamped petals offer exceptional strength and accuracy
Panels are uniform and interchangeable
High reflector accuracy means transmit approved reflector
Stainless reflector hardware standard
Galvanized steel support structure and hub for exceptional antenna strength and accuracy

KINGPOST

Made of galvanized, heavy gauge steel for long life and stability
14" steel kingpost offers greater stability than smaller kingpost designs used by some manufacturers
Special design allows the use of different drive systems without modification to the structure
Integrated kingpost features allow for clean and easy wiring as well as simple grounding of the structure
Standard 130 degrees travel with actuators attached
Optional rear kickers available for additional ground and roof mount stability/improved load distribution
Unique design lowers the antenna's center of gravity below the attachment point for greater stability

FEED

Quad feed support for exceptional feed stability
Standard feed attachments for readily available feeds
Adjustable feed struts allow for precise positioning of the feed at focal point

DRIVE SYSTEMS

Antenna allows for easy use of a variety of drive systems without changing azimuth attachment points
System designed to allow the use of standard 36, 90, 180 VDC and AC drive systems
36 VDC controllers like the RCI 2000 can be used with 36VDC drive systems but should high wind drive stability ever be required, 90 VDC applications are available using the same controller
Optional manual locking bars for fixed applications

REMOTE CONTROL AND AUTOMATION

Compatible with PC control and automation systems from manufacturers like Image Communications.
Unique kingpost design allows for simple transition from 36 VDC drive systems to 90 VDC drive systems without modification to kingpost or change in automation driver when using the RCI 2000 controller.