



RING-FOCUS ANTENNA

Electrical & MANUAL C/Ku band antenna is of ring-focus type, the pedestal is of E-A truss-like type and uses three-phase asynchronous motor for driving. The antenna can be used in synchronous orbit satellite communications, data transmission, microwave radio relay communication and satellite TV receiving for receiving and transmitting. The antenna performance complies with antenna requirements of satellite earth station stipulated by CCIR-580.

These ring-focus large dish antennas are for reference only, other bands can be made to the customer requirements, the size of dish can be made up to 20 Meters.

The main/sub-reflector of the ring-focus antenna adopts dual shaped design, and featuring good electric characteristics such as high gain, high efficiency, low side lobe, low VSWR and wide frequency band. The antenna modeling is beautiful, robust engineering design with high stiffness, and excellent wind resistance, aiming accuracy and easy installations. The antenna surface is painted for antirust, humidity resistance and salty air resistance, and ensures the antenna have robust anti-corrosion performance under the severe environment.



Applications :

- C band and ku band
- Satellite communications,
- TV receiving and broadcasting
- Data transmission
- Microwave radio relay communication

Features:

- Excellent front to back ratio
- Robust engineering design
- Manual or Electrical driving
- UV stable light gray powder coat finish
- Easy to assemble
- All weather operation

2.4m ELECTRICAL & Manual C/Ku BAND RING-FOCUS ANTENNA

These ring-focus large dish antennas are for reference only, other bands can be made to the customer requirements, the size of dish can be made up to 20 Meters.

2.4m ELECTRICAL & MANUAL C/Ku BAND RING-FOCUS ANTENNA				
Model	ZDARF-2.4			
Electromagnetic specifications	C-band		Ku-band	
	Receive	Transmit	Receive	Transmit
Frequency (GHz)	3.625~4.200	5.850~6.425	10.95~12.75	13.75~14.50
Gain (dBi)	≥38.4	≥41.6	≥47.8	≥49
VSWR	1.25 : 1	1.25 : 1	1.25 : 1	1.25 : 1
Beam-width(-3dB)	2.03	1.35	0.68	0.57
	(-15dB)	3.63°	2.42°	1.21
10 elevation	36K		52K	
20 elevation	30K		44K	
40 elevation	25K		39K	
Power capacity	5000W		2000W	
Interface type	CPR-229	CPR-137	WR-75	WR-75
Feeder insertion loss	0.2 dB	0.15dB	0.25dB	0.25dB
R/T isolation	85dB		85dB	
Polarization type	Linear /circular polarization		Linear polarization	
Polarization of out of round ness (Two-port)	1.5 dB	0.75 dB		
	0.5 dB	0.5 dB		
Polarization of out of round ness (Four-port)	0.5 dB	0.5 dB		
Cross isolation	35dB	35dB	35dB	35dB
First side lobe	-14 dB			
Far side lobe	Satisfy with CCIR580-5 requirements			



Mechanical performance	Parameter
Azimuth rotation range	±85°Change section
Azimuth rotation speed	0.08~0.1°/s
Elevation rotation range	0°~90° continuously
Elevation rotation speed	0.08~0.1°/s
Polarization rotation range	±90°
Surface accuracy	≤0.5mm (RMS)
Antenna scale indication accuracy	0.5°

Environment characteristics	Parameter
Operation wind speed	20-35m/s
Survival wind speed	55m/s Lock antenna when it faces to the sky
Environmental temperature	-45°~60°C
Relative humidity	10%~98%
Ice-accumulation	≥2.5cm
Seismic (Survival)	Horizontal 0.3G· S Vertical 0.15G· S



3M ELECTRICAL & Manual C/Ku BAND RING-FOCUS ANTENNA

These ring-focus large dish antennas are for reference only, other bands can be made to the customer requirements, the size of dish can be made up to 20 Meters.

3M ELECTRICAL & Manual C/Ku BAND RING-FOCUS ANTENNA				
Model	ZDARFCKu-3			
Electromagnetic specifications	C-Band		Ku-Band	
	Receive	Transmit	Receive	Transmit
Frequency (GHz)	3.625~4.200	5.850~6.425	10.95~12.75	13.75~14.50
Gain (dBi)	≥40.4	≥43.6	≥49.5	≥50.9
VSWR	1.25 : 1	1.25 : 1	1.25 : 1	1.25 : 1
Beam-width(-3dB)	1.62	1.08	0.54	0.48
(-15dB)	2.9°	1.94°	0.97	0.82
10 elevation	36K		52K	
20 elevation	30K		44K	
40 elevation	25K		39K	
Power capacity	5000W		2000W	
Interface type	CPR-229	CPR-137	WR-75	WR-75
Feeder insertion loss	0.2 dB	0.15dB	0.25dB	0.25dB
R/T isolation	85dB		85dB	
Polarization type	Linear/circular polarization		Linear polarization	
Polarization of out of round ness (Two-port)	1.5 dB	0.75 dB		
Polarization of out of round ness (Four-port)	0.5 dB	0.5 dB		
Cross isolation	35dB(on axis)	35dB (on axis)	35dB (on axis)	35dB(on axis)
First side lobe	-14 dB			
Far side lobe	Satisfy with CCIR580-5 requirements			

Mechanical performance	Parameter
Azimuth rotation range	±85°Change section
Azimuth rotation speed	0.08°-0.1°/s
Elevation rotation range	0°~90°continuously
Elevation rotation speed	0.08°-0.1°/s
Polarization rotation range	±90°
Surface accuracy	0.5mm (RMS)
Antenna scale indication accuracy	0.5°

Environment characteristics	Parameter
Operation wind speed	20-35m/s
Survival wind speed	55m/s
	Lock antenna when it faces to the sky
Environmental temperature	-45°~60°C
Relative humidity	10%~98%
Ice-accumulation	≥2.5cm
Seismic (Survival)	Horizontal0.3G· S Vertical 0.15G· S

3.7M ELECTRICAL & Manual C/Ku BAND RING-FOCUS ANTENNA

These ring-focus large dish antennas are for reference only, other bands can be made to the customer requirements, the size of dish can be made up to 20 Meters.

3.7M ELECTRICAL & Manual C/Ku BAND RING-FOCUS ANTENNA				
Model	ZDARFCKu-3.7			
Electromagnetic specifications	C-Band		Ku-Band	
	Receive	Transmit	Receive	Transmit
Frequency (GHz)	3.625~4.200	5.850~6.425	10.95~12.75	13.75~14.50
Gain (dBi)	≥42.2	≥45.4	≥51.3	≥52.7
VSWR	1.25 : 1	1.25 : 1	1.25 : 1	1.25 : 1
Beam-width(-3dB)	1.32	0.88	0.44	0.38
(-15dB)	2.35°	1.57°	0.78	0.66
10 elevation	36K		52K	
20 elevation	30K		44K	
40 elevation	25K		39K	
Power capacity	5000W		2000W	
Interface type	CPR-229	CPR-137	WR-75	WR-75
Feeder insertion loss	0.2 dB	0.15dB	0.25dB	0.25dB
R/T isolation	85dB		85dB	
Polarization type	Linear/circular polarization		Linear polarization	
Polarization of out of round ness (Two-port)	1.5 dB	0.75 dB		
Polarization of out of round ness (Four-port)	0.5 dB	0.5 dB		
Cross isolation	35dB(on axis)	35dB(on axis)	35dB(on axis)	35dB(on axis)
First side lobe	-14 dB			
Far side lobe	Satisfy with CCIR580-5 requirements			



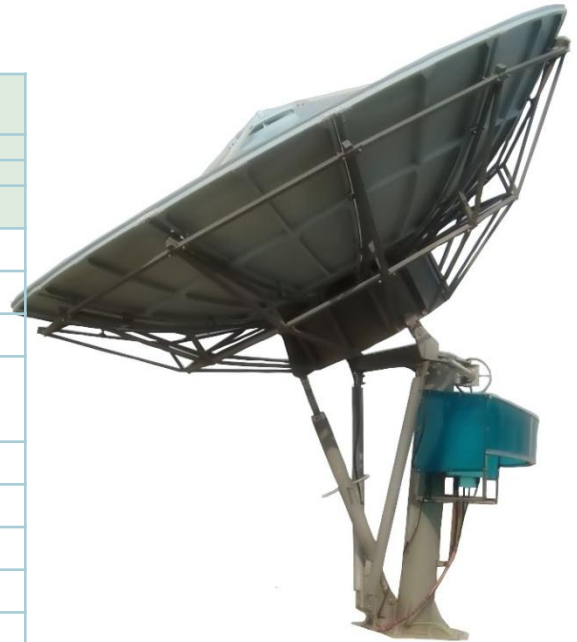
Mechanical performance	Parameter
Azimuth rotation range	±85° Change section
Azimuth rotation speed	0.03°-0.055°/s
Elevation rotation range	0°~90°continuously
Elevation rotation speed	0.03°-0.055°/s
Polarization rotation range	±90°
Surface accuracy	0.5mm (RMS)
Antenna scale indication accuracy	0.5°

Environment characteristics	Parameter
Operation wind speed	20-35m/s
Survival wind speed	55m/s Lock antenna when it faces to the sky
Environmental temperature	-45°~60°C
Relative humidity	10%~98%
Ice-accumulation	≥2.5cm
Seismic (Survival)	Horizontal 0.3G· S Vertical 0.15G· S

4.5M Electrical & Manual C/Ku BAND RING-FOCUS ANTENNA

These ring-focus large dish antennas are for reference only, other bands can be made to the customer requirements, the size of dish can be made up to 20 Meters.

4.5M Electrical & Manual C/Ku BAND RING-FOCUS ANTENNA				
Model	Zdarfcku-4.5			
Electromagnetic specifications	C-Band-		Ku-Band-	
	Receive	Transmit	Receive	Transmit
Frequency (GHz)	3.625~4.200	5.850~6.425	10.95~12.75	13.75~14.50
Gain (dBi)	≥43.9	≥47.1	≥53	≥54.4
VSWR	1.25 : 1	1.25 : 1	1.25 : 1	1.25 : 1
Beam-width(-3dB)	1.08	0.72	0.36	0.31
(-15dB)	1.94°	1.29°	0.65	0.55
10 elevation	36K		52K	
20 elevation	30K		44K	
40 elevation	25K		39K	
Power capacity	5000W		2000W	
Interface type	CPR-229	CPR-137	WR-75	WR-75
Feeder insertion loss	0.2 dB (two-port)	0.15dB (two-port)	0.25dB (two-port)	0.25dB (two-port)
	0.25dB (four-port)	0.2dB (four-port)	0.4dB (four-port)	0.4dB (four-port)
R/T isolation	85dB		85dB	
Polarization type	Linear/circular polarization		Linear polarization	
Polarization of out of roundness (Two-port)	1.5 dB	0.75 dB		
Polarization of out of roundness (Four-port)	:0.5 dB	:0.5 dB		
Cross isolation	35dB (on axis)	35dB (on axis)	35dB (on axis)	35dB (on axis)
First side lobe	-14 dB			
Far side lobe	Satisfy with CCIR580-5 requirements			



Mechanical performance	Parameter
Azimuth rotation range	±85° Change section
Azimuth rotation speed	0.03°-0.055°/s
Elevation rotation range	0°~90°continuously
Elevation rotation speed	0.03°-0.055°/s
Polarization rotation range	±90°
Surface accuracy	0.5mm (RMS)
Antenna scale indication accuracy	0.5°

Environment characteristics	Parameter
Operation wind speed	20-35m/s
Survival wind speed	55m/s
	Lock antenna when it faces to the sky
Environmental temperature	-45° ~60°C
Relative humidity	10%~98%
Ice-accumulation	≥2.5cm
Seismic (Survival)	Horizontal 0.3G· S Vertical 0.15G· S

6.2M Electrical & Manual C/Ku BAND RING-FOCUS ANTENNA

These ring-focus large dish antennas are for reference only, other bands can be made to the customer requirements, the size of dish can be made up to 20 Meters.

6.2M Electrical & Manual C/Ku BAND RING-FOCUS ANTENNA				
Model	ZDARFCKu-6.2			
Electromagnetic specifications	C-Band		Ku-Band	
	Receive	Transmit	Receive	Transmit
Frequency (GHz)	3.625~4.200	5.850~6.425	10.95~12.75	13.75~14.50
Gain (dBi)	≥46.7	≥49.9	≥57.2	≥55.8
VSWR	1.25 : 1	1.25 : 1	1.25 : 1	1.25 : 1
Beam-width(-3dB)	0.79	0.52	0.26	0.23
(-15dB)	1.41°	0.94°	0.47	0.4
10 elevation	36K		52K	
20 elevation	30K		44K	
40 elevation	25K		39K	
Power capacity	5000W		2000W	
Interface type	CPR-229	CPR-137	WR-75	WR-75
Feeder	0.2 dB (two-port)	0.15dB (two-port)	0.25dB (two-port)	0.25dB (two-port)
Insertion loss	0.25dB (four-port)	0.2dB (four-port)	0.4dB (four-port)	0.4dB (four-port)
R/T isolation	85dB		85dB	
Polarization type	Linear/circular polarization		Linear polarization	
Polarization of out of round ness (Two-port)	0.75 dB	1.5 dB		
Polarization of out of round ness (Four-port)	: 0.5 dB	:0.5 dB		
Cross isolation	35dB(on axis)	35dB(on axis)	35dB(on axis)	35dB(on axis)
First side lobe	-14 dB			
Far side lobe	Satisfy with CCIR580-5 requirements			



Mechanical performance	Parameter
Azimuth rotation range	±85°
Azimuth rotation speed	0.03°-0.055°/s
Elevation rotation range	0°~90°continuously
Elevation rotation speed	0.03°-0.055°/s
Polarization rotation range	±90°
Surface accuracy	0.5mm (RMS)
Antenna scale indication accuracy	0.5°

Environment characteristics	Parameter
Operation wind speed	20-35m/s
Survival wind speed	55m/s
	Lock antenna when it faces to the sky
Environmental temperature	-45° ~60℃
Relative humidity	10%~98%
Ice-accumulation	≥2.5cm
Seismic (Survival)	Horizontal 0.3G· S Vertical 0.15G· S