# 3.7 Meter Wide C-Band RxO Antenna

## Series 1374

## **Antenna Technologies**



### Overview

The CPI Antenna Technologies' 3.7m Wide C-Band RxO Antenna Series 1374 is ideally suited for demanding commercial applications. The 8-piece compression molded reflector is precision manufactured for high-efficiency operation. The Az/El mount is designed for easy installation on standard 6" Schedule Pipe (6.63" or 168 mm OD) Installation Mounts and features fine Elevation Adjustment. The Az/El mount is constructed from heavy gauge galvanized steel for strength and corrosion resistance.

The electrical performance is compliant with FCC and ITU-RS-580 sidelobe specifications and Intelsat (A, B, C) and Eutelsat requirements.



#### **FEATURES:**

- Available in offset axisymmetric designs
- Designed for 3.4 to 12.75 GHz operation, meeting FCC and ITU-RS-580 requirements
- Galvanized steel elevation-over-azimuth pedestal with jackscrews
- Survives 125 mph winds in any position

#### **BENEFITS:**

- High antenna efficiencyExcellent rejection of noise and microwave interference
- Quickly re-establish communications in the wake of a disaster

#### **APPLICATIONS:**

• Communications, Data Transfer, Broadcast



### **Specifications**

ELECTRICAL <sup>(1)</sup>	Series 1374 LP C-Band	Series 1374 CP C-Band
Antenna Size	3.7 m (144 in)	3.7 m (144 in)
Operating Frequency (GHz)	3.400 - 4.200	3.400 - 4.200
Antenna Gain, Midband ( +/3dBi)	40.90 dBi	40.90 dBi
Antenna Noise Temperature (K) 10° Elevation 20° Elevation 30° Elevation	41 K 39 K 37 K	39 K 37 K 35 K
Antenna Sidelobe Envelope	Per ITU-R S.580-6	Per ITU-R S.580-6
Antenna Beamwidth	1.5°	1.55°
Polarization	Linear, orthogonal	Circular, orthogonal
Cross Polarization Isolation On Axis	>30 dB	>21.3 dB
VSWR	1.43:1 Max.	1.4:1 Max.
Operating Frequency (GHz)	3.40-4.20 GHz	3.40-4.20 GHz
Isolation, Port-to-Port	35 dB	18 dB
Feed Interface	2 x CPR229F	2 x CPR229F

<sup>(1)</sup> Some specifications may vary based on the combination of equipment, options and/or upgrades ordered.



## **Specifications**

Reflector Material   Glass fiber reinforced polyester SMC     Antenna Optics   Prime focus, axisymmetric, 0.375 F/D, 8 pc reflector     Mount Type   Elevation over Azimuth     Mast Pipe Size   G SCH pipe (6.63° OD) 168 mm OD     Elevation Adjustment Range   G SCH pipe (6.63° OD) 168 mm OD     Azimuth Adjustment Range   G SCH pipe (6.63° OD) 168 mm OD     Dedination Corrected Polar Range   90° arc coverage with 36° actuator     Shipping Specifications   S75 lbs (259 kg)     ENVIRONMENTAL <sup>(1)</sup> Vind Loading     Operational   Survival     Survival   G Str pipe (201 km/h)     Imperature   Operational     Survival   Operational     Rain   Operational     Survival   Ye' (13 mm)/hr     Lice   Survival     Salt, pollutants, and contaminants as encountered in coastal and industrial areas     Solar Radiation   Salt, pollutants, and contaminants as encountered in coastal and industrial areas	MECHANICAL <sup>(1)</sup>			
Mount Type     Elevation over Azimuth       Mast Pipe Size     6" SCH pipe (6.63" OD) 168 mm OD       Elevation Adjustment Range     10° to 70° continuous fine adjustment (90° optional)       Azimuth Adjustment Range     360° continuous       Declination Corrected Polar Range (1305/1345/1375)     90° arc coverage with 36" actuator       Shipping Specifications     575 lbs (259 kg)       ENVIRONMENTAL <sup>(1)</sup> Vind Loading     Operational Survival       Temperature     Operational Survival     45 mph (72 km/h) 125 mph (201 km/h)       Rain     Operational Survival     -40° to 140° F (-40° to 60° C) -50° to 160° F (-46° to 71° C)       Rain     Operational Survival     ½" (13 mm) / hr 2 inch /hr (51 mm /hr)       Ice     Survival     ½ inch (13 mm) radial ice       Atmospheric Conditions     Salt, pollutants, and contaminants as encountered in coastal and industrial areas	Reflector Material		Glass fiber reinforced polyester SMC	
Mast Pipe Size6" SCH pipe (6.63" OD) 168 mm ODElevation Adjustment Range10° to 70° continuous fine adjustment (90° optional)Azimuth Adjustment Range360° continuousDeclination Corrected Polar Range (1305/1345/1375)90° arc coverage with 36" actuatorShipping Specifications575 lbs (259 kg)ENVIRONMENTAL <sup>(1)</sup> Wind Loading SurvivalOperational Survival45 mph (72 km/h) 125 mph (201 km/h)Temperature SurvivalOperational SurvivalPerform Survival-40° to 140° F (40° to 60° C) -50° to 160° F (46° to 71° C)Rain SurvivalOperational SurvivalIce Survival½ inch (13 mm) / hr 2 inch /hr (51 mm /hr)Ice SurvivalSalt, pollutants, and contaminants as encountered in coastal and industrial areas	Antenna Optics		Prime focus, axisymmetric, 0.375 F/D, 8 pc reflector	
Elevation Adjustment Range   10° to 70° continuous fine adjustment (90° optional)     Azimuth Adjustment Range   360° continuous     Declination Corrected Polar Range   90° arc coverage with 36" actuator     Shipping Specifications   575 lbs (259 kg)     ENVIRONMENTAL <sup>(1)</sup> 125 mph (72 km/h)     Wind Loading   Operational Survival     Shipping Specifications   -40° to 140° F (-40° to 60° C)     Survival   -40° to 140° F (-40° to 60° C)     Survival   -50° to 160° F (-46° to 71° C)     Rain   Operational Survival   ½ (13 mm) / hr     Lee   Survival   ½ inch (13 mm) radial ice     Atmospheric Conditions   Salt, pollutants, and contaminants as encountered in coastal and industrial areas	Mount Type		Elevation over Azimuth	
Azimuth Adjustment Range   360° continuous     Declination Corrected Polar Range (1305/1345/1375)   90° arc coverage with 36" actuator     Shipping Specifications   575 lbs (259 kg)     ENVIRONMENTAL <sup>(1)</sup> 125 mph (72 km/h) 125 mph (201 km/h)     Vind Loading Operational Survival   45 mph (72 km/h) 125 mph (201 km/h)     Temperature Operational Survival   -40° to 140° F (-40° to 60° C) -50° to 160° F (-46° to 71° C)     Rain Operational Survival   ½" (13 mm) / hr 2 inch /hr (51 mm /hr)     Ice Survival   ½ inch (13 mm) radial ice     Atmospheric Conditions   Salt, pollutants, and contaminants as encountered in coastal and industrial areas	Mast Pipe Size		6" SCH pipe (6.63" OD) 168 mm OD	
Declination Corrected Polar Range (1305/1345/1375)   90° arc coverage with 36″ actuator     Shipping Specifications   575 lbs (259 kg)     ENVIRONMENTAL <sup>(1)</sup> 1000 mmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmm	Elevation Adjustment Range		10° to 70° continuous fine adjustment (90° optional)	
(1305/1345/1375)   90° arc coverage with 36° actuator     Shipping Specifications   575 lbs (259 kg)     ENVIRONMENTAL <sup>(1)</sup> 45 mph (72 km/h)     Wind Loading   Operational     Survival   45 mph (72 km/h)     Temperature   Operational     Survival   -40° to 140° F (-40° to 60° C)     Rain   Operational     Survival   ½ "(13 mm) / hr     2 inch /hr (51 mm /hr)   1ce     Survival   5alt, pollutants, and contaminants as encountered in coastal and industrial areas	Azimuth Adjustment Range		360° continuous	
ENVIRONMENTAL <sup>(1)</sup> Wind Loading   Operational Survival     125 mph (72 km/h) 125 mph (201 km/h)     Temperature   Operational Survival     -40° to 140° F (-40° to 60° C) -50° to 160° F (-46° to 71° C)     Rain   Operational Survival     V/" (13 mm) / hr 2 inch /hr (51 mm /hr)     Ice   Survival     Survival   ½ inch (13 mm) radial ice     Atmospheric Conditions   Salt, pollutants, and contaminants as encountered in coastal and industrial areas	Declination Corrected Polar Range (1305/1345/1375)		90° arc coverage with 36" actuator	
Wind Loading   Operational Survival   45 mph (72 km/h) 125 mph (201 km/h)     Temperature   Operational Survival   -40° to 140° F (-40° to 60° C) -50° to 160° F (-46° to 71° C)     Rain   Operational Survival   ½" (13 mm) / hr 2 inch /hr (51 mm /hr)     Ice   Survival   ½ inch (13 mm) radial ice     Atmospheric Conditions   Salt, pollutants, and contaminants as encountered in coastal and industrial areas	Shipping Specifications		575 lbs (259 kg)	
Survival   125 mph (201 km/h)     Temperature   Operational Survival   -40° to 140° F (-40° to 60° C) -50° to 160° F (-46° to 71° C)     Rain   Operational Survival   1/2" (13 mm) / hr 2 inch /hr (51 mm /hr)     Ice   Survival   ½ inch (13 mm) radial ice     Atmospheric Conditions   Salt, pollutants, and contaminants as encountered in coastal and industrial areas	ENVIRONMENTAL <sup>(1)</sup>			
Survival Survival   Rain Operational Survival ½" (13 mm) / hr 2 inch /hr (51 mm /hr)   Ice Survival   Atmospheric Conditions Salt, pollutants, and contaminants as encountered in coastal and industrial areas	Wind Loading			
Operational Survival   ½" (13 mm) / hr 2 inch /hr (51 mm /hr)     Ice   Survival     Atmospheric Conditions   Salt, pollutants, and contaminants as encountered in coastal and industrial areas	Temperature		, , ,	
Atmospheric Conditions Salt, pollutants, and contaminants as encountered in coastal and industrial areas	Rain			
	Ice	Survival	½ inch (13 mm) radial ice	
Solar Radiation 360 BTU/h/ft² (1135 w/m²)	Atmospheric Conditions		Salt, pollutants, and contaminants as encountered in coastal and industrial areas	
	Solar Radiation		360 BTU/h/ft² (1135 w/m²)	

<sup>(1)</sup> Some specifications may vary based on the combination of equipment, options and/or upgrades ordered.

#### Contact us at CustomerCareSAT@cpii.com or call us at +1 770-689-2040

The data should be used for basic information only. Formal, controlled specifications may be obtained from CPI for use in equipment design.



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