

ECOSD1Y2P



Features & Applications

- 1 x Mid + 2 x C band cylindrical Tri-Sector Antenna
- H 65°, V 16° / H 65°, V 12°
- Gain : 13.5 dBi / 14.3 dBi
- Electrical Down tilt : 2°-12°

ELECTRICAL SPECIFICATIONS

Frequency Information	-	Y1 – Y3			
Frequency Range	(MHz)	1695-1910	1910-2180	2305-2360	2360-2700
Gain (AVG.)	(dBi)	12.9	13.1	13.3	13.5
Horizontal Pattern					
Azimuth Beam width	(°)	67	65	63	61
Front-to-Back Ratio	(dB)	23	23	24	20
Cross Polar Discrimination at Boresight	(dB)	18	18	18	15
Vertical Pattern					
Elevation Beam width	(°)	18	16	16	14
Electrical Downtilt continuously Adjustable	(°)	2-12			
First Upper Side Lobe Suppression	(dB)	15			

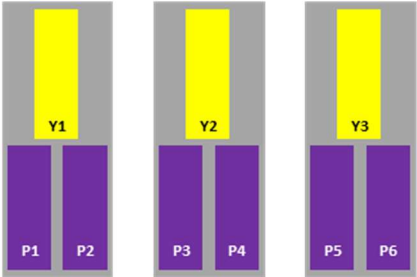
ELECTRICAL SPECIFICATION

Port information	-	P1-P6		
Frequency Range	(MHz)	3300-3550	3550-3700	3700-4200
Gain (AVG.)	(dBi)	13.8	14.1	14.3
Horizontal Pattern				
Azimuth Beam width	(°)	66	63	60
Front-to-Back Ratio	(dB)	25		
Cross Polar Discrimination at Boresight	(dB)	18		
Vertical Pattern				
Elevation Beam width	(°)	13	12	11
Electrical Downtilt continuously Adjustable	(°)	2-12		
First Upper Side Lobe Suppression	(dB)	15		

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GENERAL SPECIFICATIONS			
Intra-Cluster Isolation	(dB)	>25	
Inter-Cluster Isolation		>25 (Y1 / P1, P2) >20 (P1 / P2)	
VSWR	-	1.5 : 1	
Polarization	-	±45°	
Intermodulation IM3	(dBc)	-153(3rd Order, 2x20W)	
Impedance	(Ω)	50	
Max. Effective Power per Port	(Watts)	100	50

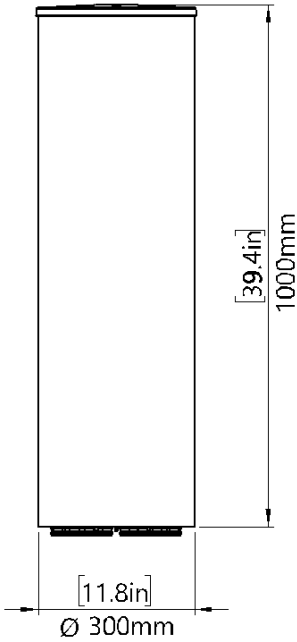
Array Information



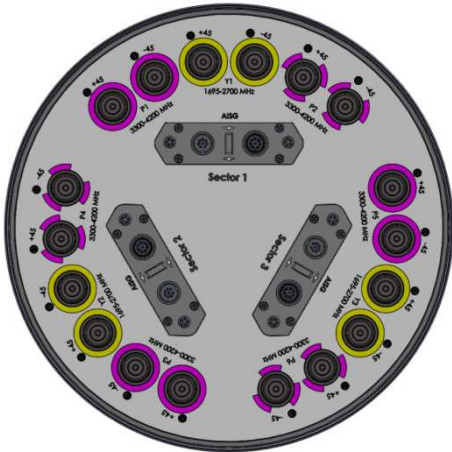
Sector No	Array	Frequency (MHz)	Connectors
Sector #1	Y1	1695-2700	1-2
	P1-P2	3300-4200	3-6
Sector #2	Y2	1695-2700	7-8
	P3-P4	3300-4200	9-12
Sector #3	Y3	1695-2700	13-14
	P5-P6	3300-4200	15-18

Mechanical Dimensions

Outline



Bottom



MECHANICAL SPECIFICATIONS		
Connector Type & Quantity	-	18 x 4.3-10 Female
Connector Position	-	Bottom
Antenna Dimension (W x D x H)	(mm)	Ø 300 x 1000
Packing Dimension (W x D x H)	(mm)	360 x 360 x 1100
Weight (without Mounting Kit)	(kg)	30
Packing Weight	(kg)	37
Max.Wind Load (@100 mph)	(N)	270
Radome (Color)	-	ASA(Cool Gray)

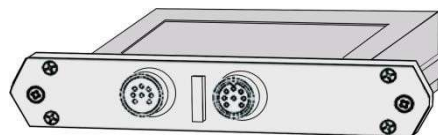
Remote Electrical Tilt (RET)		
RET	-	RETP-1T2(Internal RET 2 CH.)
Protocol	-	3GPP/AISG 2.0

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Internal RET (Remote Electrical Tilting device)

Features & Applications

- Remote Electrical Tilting device for Multi/Single antennas with electrical down-tilt
- Firmware updatable & Flexibly change mode(Multi or Single)
- Compliant to AISG 2.0 / 3GPP
- Compact size



Technical Specification	
Product	RETP-1T3(internal replaceable RET)
Protocol	Match 3GPP B/ AISG2.0
Input voltage range	+10 ~ +30VDC (pin 6)
Power consumption	< 2W (stand by); < 13W (motor activated)
Connectors (AISG)	2x8Pin Connector (IEC60130-9) According to AISG connect type: Male is input Female is output (Male/Female can be input and output)
Hardware interface (AISG)	RS485A/B (pin5/pin3); Power supply (pin6); DC return (pin7) Acc. to AISG
Adjustment time (full range)	10~120 Seconds (typical 40S, Depends different Antenna)
Temperature range	-40 ~ +70°C
Protection class	IP65
Adjustment Cycles	10000 times
Housing material	Housing: Aluminum (Electrophoresis) Upper / Bottom cover: Zinc Alloys (Trivalent chromium plating)