74212045

Log Periodic Antenna
698-2700 / 3300-4200
12dBi/16dBi

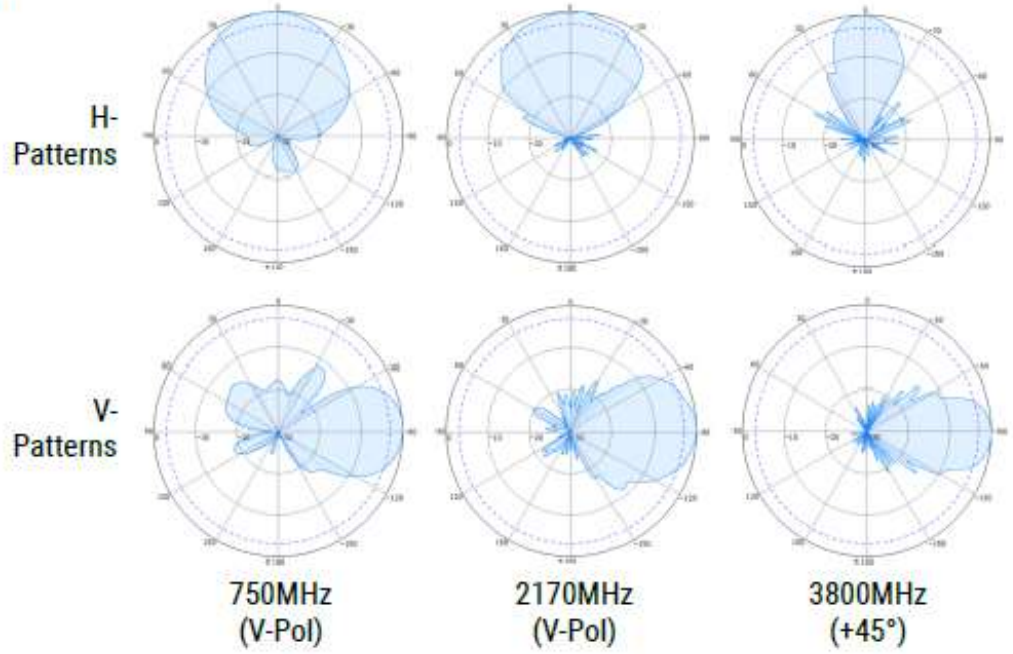
Log Periodic Antenna
VH-Pol 4-port
12/16dBi
698-4200

Preliminary

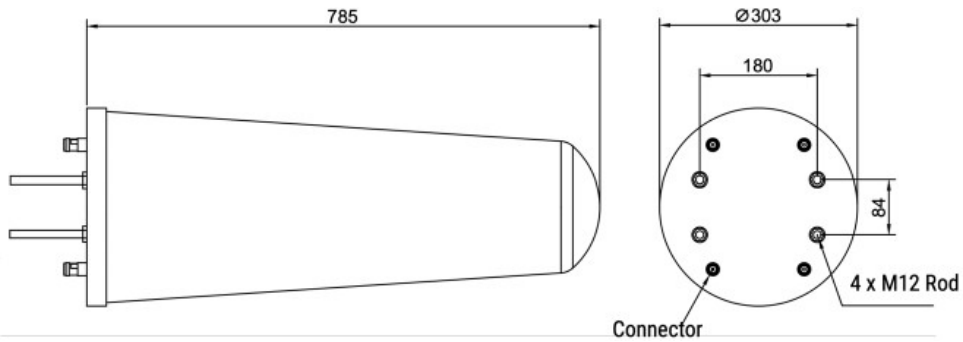
Type	74212045				
Port/Band	Port 2 (V-Pol) & 3 (H-Pol)			Port 1 (+45º) & 4 (-45º)	
Frequency Range (MHz)	698-960	1425-2170	2170-2700	3300-3800	3800-4200
Gain (dBi, typ.)	11.1	12.2	11.9	15.9	15.8
VSWR	≤ 1.8	≤ 1.6	≤ 1.6	≤ 1.6	≤ 1.6
Polarization	Vertical / Horizontal			±45º	
PIM3 (dBc), @2x43dBm	≤ -150				
Horizontal Beamwidth (°)	62	59	60	30	31
Vertical Beamwidth (°)	39	36	42	30	31
Isolation (dB)	≥ 18	≥ 24	≥ 28	≥ 28	≥ 28
Front-to-Back Ratio (dB)	≥ 18	≥ 26	≥ 25	≥ 28	≥ 26
Input Impedance (Ω)	50				
Max. Input Power (W)	200				
Lightning Protection	DC Grounded				
Connector Type	4 x 4.3-10 Female				
Dimension (mm)	303 x 303 x 785				
Weight (kgs)	5.2				
Reflector Material	Copper				
Radome Material	Fiber Glass (RAL7035)				
Ingress protection	IP56				
Rated Wind Velocity (km/h)	**200**				
Operating Temperature (°C)	-40 to +65				
Wind Load (N) (@150km/h Wind Speed)	Frontal: 58.8 | Lateral: 185.2 | Rearside: 96.4				
Mounting	4 x M12 Threaded Rods (L=162mm) with Washers and Nuts 2 sets of brackets included for pole size Ø38-Ø70mm All mounting materials and accessories in **316 stainless steel**				

Complaint to Environmental Standards	Dry Heat	GB/T 2423.2	(IEC 60068-2-2)
	Cold	GB/T 2423.1	(IEC 60068-2-1)
	Damp Heat	GB/T 2423.3	(IEC 60068-2-78)
	Change of Temperature	GB/T 2423.22	(IEC 60068-2-14)
	Salt Mist	GB/T 2423.17	(IEC 60068-2-11)
		GB/T 10125	(ISO 9227)
	Ingress Protection	GB/T 4208	(IEC 60529)
	Vibration	GB/T 2423.10	(IEC 60068-2-64)
	Drop Test	GB/T 2423.8 & 4857.5	(ISO 2248)

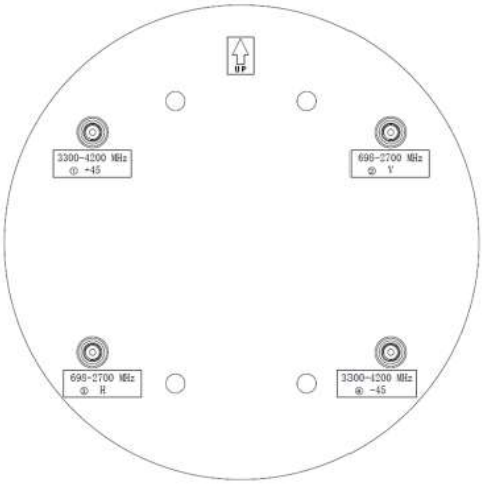
Typical Radiation Patterns



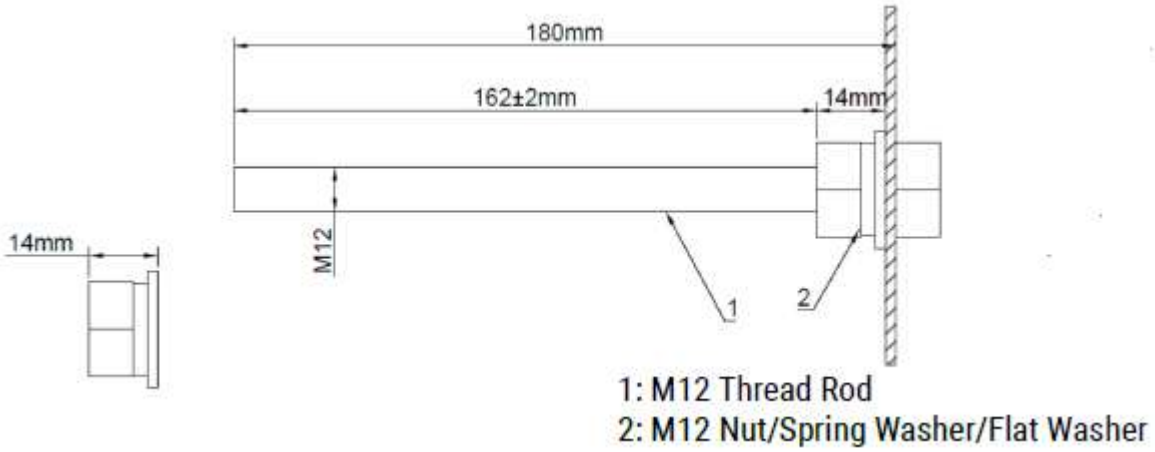
Mechanical Drawing



Port Assignment



Mounting thread rod Illustration



Note:

The antenna has passed a wind load / pressure test according to YD/T 2866-2015 for the use of the passive antenna in mobile communication system. During test the antenna was subject to alternating pressure with certain number of alternations of load according to different wind speed / pressure difference.
The antenna exceeds the standard as follows:

- Pressure difference according to YD/T 2866: 257.02N*
- Pressure difference during test: 403.2N

Based on the above test, the antenna withstands the pressure curve exerted by passing trains inside the tunnel (8 kPa).
*Calculated based on antenna surface and rated wind speed.