

# 74212010v01ES

**Log Periodic Antenna**  
**690-4000 12/14dBi**

Log Periodic Antenna  
V-Pol 1-port 12/14dBi  
690-4000MHz

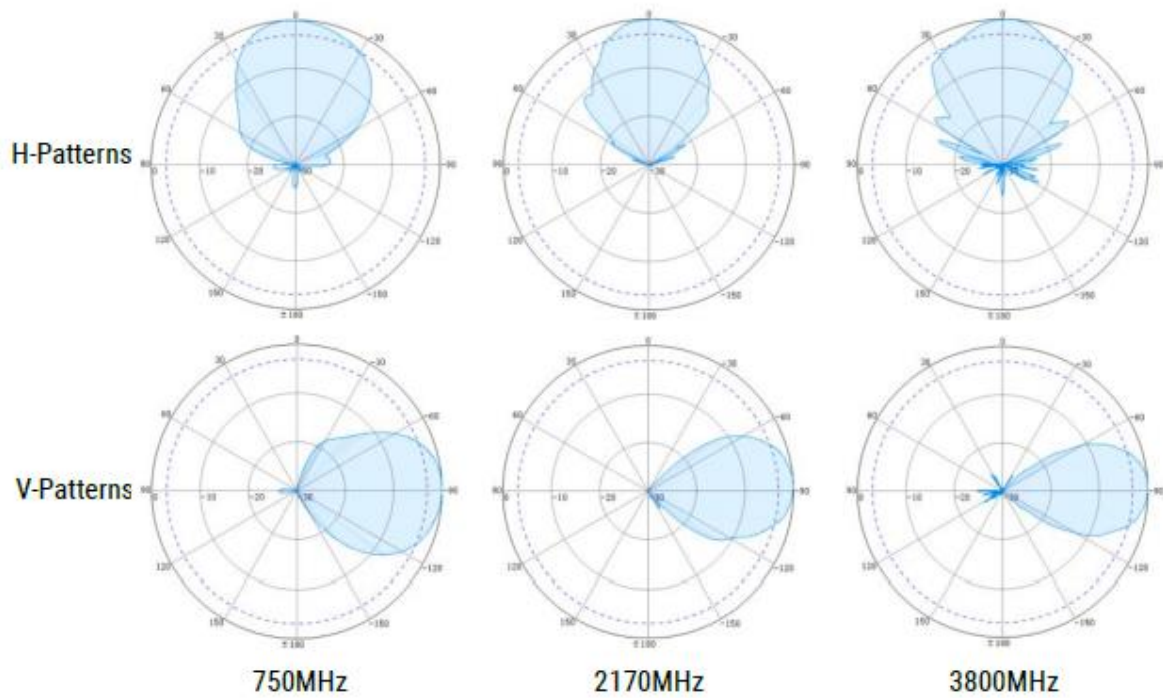
Type	74212010v01ES				
Frequency Range (MHz)	690-806	806-960	1425-2170	2170-2700	3300-4000
Gain (dBi, typ.)	11.5	12.5	13.5	13.5	13.5
VSWR	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5
Polarization	Vertical				
PIM3 (dBc), @2x43dBm	≤ -150				
Horizontal Beamwidth (°)	56	54	45	41	40
Vertical Beamwidth (°)	47	45	37	35	32
Front-to-Back Ratio (dB)	≥ 25	≥ 25	≥ 25	≥ 25	≥ 23
Input Impedance (Ω)	50				
Total Power (W)	500 (at 50°C ambient temperature)				
Lightning Protection	DC Grounded				
Connector Type	1 x 4.3-10 Female				
Dimension (mm)	250 x 200 x 1060				
Weight (kgs)	3.5				
Reflector Material	Copper				
Radome Material	Fiber Glass				
Rated Wind Velocity (km/h)	200				
Operating Temperature (°C)	-40 to +65				
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 <b>316 stainless steel</b>				
Wind Load (N) (@150km/h Wind Speed)	Frontal: 33.49   Lateral: 159.74   Rearside: 58.6				



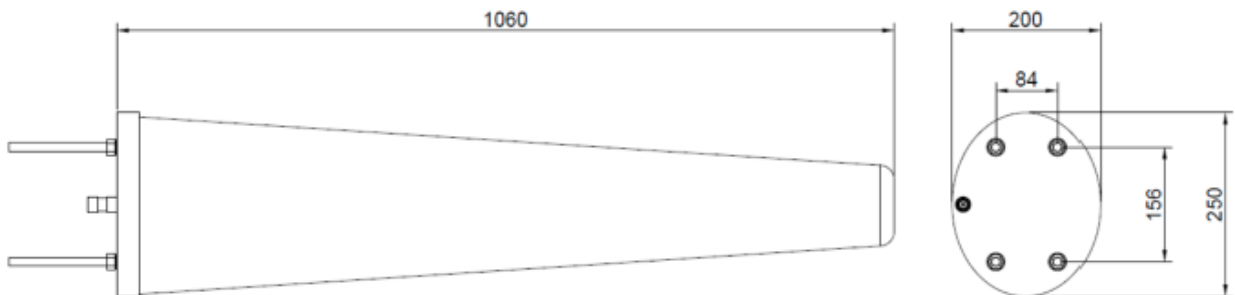
Complaint to Environmental Standards

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)
Ingress Protection	GB/T 10125	(ISO 9227)
Vibration	GB/T 2423.10	(IEC 60068-2-64)
Drop Test	GB/T 2423.8 & 4857.5	(ISO 2248)

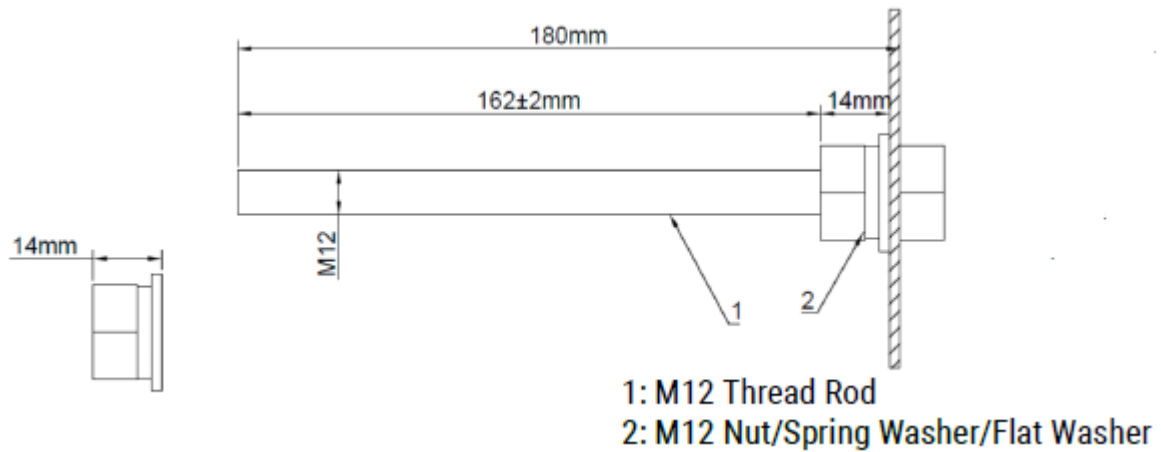
**Typical Radiation Patterns**



**Mechanical Drawing**



## 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.