

SL-2L4M-4P609016-8P172717.5-E12-V01

2*690-960/4*1710-2690MHz

65/65/65/65/65/65deg 16/16/17.5/17.5/17.5/17.5dBi XXXXXX 12+1-port antenna

Integrated and replaceable RCU, each band individually adjustable

4.3-10(F)×4+MQ4×2+N-F×1 connectors @bottom

Antenna Specifications

Electrical Properties					
Frequency Range(MHz)		R1/R2:690-960			
		690-803	790-862	820-894	880-960
Gain (dBi)	at middle tilt	14.8	15.1	15.3	15.6
	over all tilt	14.6±0.6	14.9±0.5	15.1±0.5	15.3±0.6
Polarization		+45°/-45°			
Horizontal -3dB Beamwidth(°)		70±5	67±5	66±5	62±5
Vertical -3dB Beamwidth(°)		10.5±1.2	9.5±0.9	8.2±0.9	7.5±0.8
Electrical Downtilt(°)		2-12, continuously adjustable			
First Upper Side Lobe Suppression (Typ.)(dB)		≥15.0	≥15.0	≥15.0	≥15.0
Cross Polar Ratio (0°)(dB)		≥15.0	≥15.0	≥15.0	≥15.0
Front to Back Ratio, ±30°(dB)		≥25.0	≥25.0	≥25.0	≥25.0
VSWR		<1.5			
Cross-polar Isolation (dB)		≥25			
Inter-band Isolation (dB)		≥25			
PIM3 (2×43 dBm carrier)(dBc)		≤-153			
Impedance(Ω)		50			
Grounding		DC Ground			
Max. Average Input Power per Port(W)		350 (at 50℃ ambient temperature)			

Frequency Range(MHz)		Y1/Y2/Y3/Y4:1710-2690			
		1710-1920	1920-2200	2200-2490	2490-2690
Gain (dBi)	at middle tilt	16.7	17.0	17.2	17.2
	over all tilt	16.5±0.6	16.8±0.5	17.0±0.5	17.0±0.7
Polarization		+45°/-45°			
Horizontal -3dB Beamwidth(°)		69±6	66±6	61±6	58±6
Vertical -3dB Beamwidth(°)		7.3±0.7	6.5±0.6	5.5±0.5	5.0±0.5
Electrical Downtilt(°)		2-12, continuously adjustable			
First Upper Side Lobe Suppression (Typ.)(dB)		≥15.0	≥15.0	≥15.0	≥15.0

Cross Polar Ratio (0°)(dB)	≥15.0	≥15.0	≥15.0	≥15.0
Front to Back Ratio, ±30°(dB)	≥25.0	≥25.0	≥25.0	≥25.0
VSWR	<1.5			
Cross-polar Isolation (dB)	≥25			
Inter-band Isolation (dB)	≥25			
Coupling factor between calibration port and each RF port (dB)	-26±3			
Max. amplitude tolerance from calibration port to RF ports (dB)	≤1.2			
Max. phase tolerance from calibration port to RF ports (°)	≤12			
Impedance(Ω)	50			
Grounding	DC Ground			
Max Input Power per Port (W)	250 (at 50℃ ambient temperature)			

Values based on NGMN-N-P-BASTA V11.1

A member of



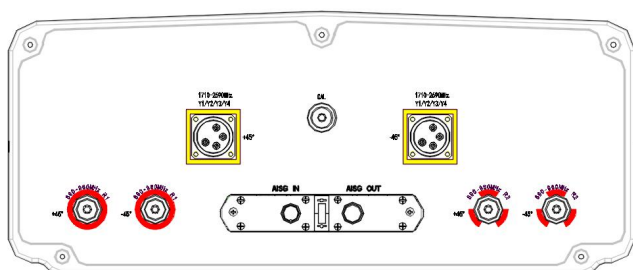
Certifications



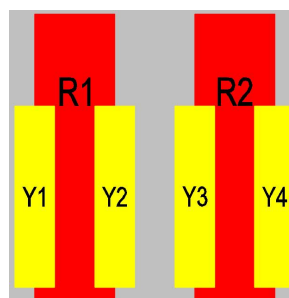
Mechanical Properties	
Radome Material	Fiberglass
Radome Colour	Light Grey
Connector Type	4.3-10(F)×12
Antenna Dimension (H×W×D)(mm)	2200×499×205
Packing Size (H×W×D)(mm)	2515X554X240
Antenna Net Weight (approx.) (kg)	39.5
Installation Kit Weight(kg)	5.6 (2 units)
Mechanical Downtilt(°)	0-10
Mast Diameter Supported(mm)	50-114
Pole Length(mm)	>2200
Operating Temperature(℃)	-40-+65
Wind Load (at 150 km/h)	1549/636/1549 N (Frontal/Lateral/Rear side)

Maximum Wind Speed (km/h)	200
RET Properties	
Power Supply	10-30V dc
Power Consumption	$\leq 2W$ (Idle), $\leq 10W$ (in Motion)
Hardware Interface	RS 485A/B(pin5, pin3); power supply(pin1, pin6); DC return(pin 7); according to AISG 2.0/3GPP
Logical Interface	HEX Coded Commands Based on HDLC Protocol
Protocol Supported	AISG 2.0/3GPP
Adjustment Time (Full Range)	<90s(typical, depending on model)
Adjustment Cycles	>20000
Torque Max.	≥ 160 mN.m
Lightning Protection Rate	IEC 61000-4-5 Current Pulse Profile, 8/20 μ s Min. @8kA $\pm$ 5 Repetitions
Connectors	2 Circle Connector According to IEC 60130-9 and AISG. Daisy Chain In: Male, Daisy Chain Out: Female

Antenna Ports

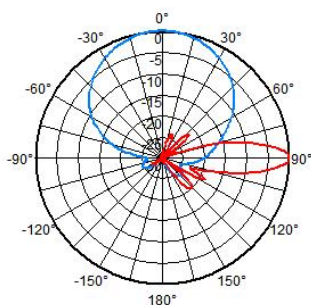


Array Layout



Reference Radiation Patterns

690-960MHz(65 deg)



1710-2690MHz(65 deg)

