SL-2L8M-4P609017-8P172718-8PSA232717-E12-V10

2*690-960/4*1695-2690/4*2300-2690MHz

65/65/65/65/65/65/90/90/90/90deg 16.5/16.5/18/18/18/18/17/17/17/17dBi XXXXXXXXXX 21-port antenna

Integrated and replaceable RCU, each band individually adjustable

21x4.3-10(F) 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	15.5	15.8	16.0	16.3
	over all tilt	15.3±0.6	15.6±0.5	15.8±0.5	16.1±0.6
Polarization		+45°/-45°			
Horizontal -3dB Beamwidth(°)		70±5	67±5	66±5	62±5
Vertical -3dB Beamwidth(°)		8.5±0.7	7.8±0.6	7.5±0.5	7.0±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)		⩾16.0	⩾16.0	⩾16.0	⩾16.0
Cross Polar Ratio (±60°)(dB)		⩾8.0	⩾7.0	⩾6.0	⩾6.0
Front to Back Ratio, ±30°(dB)		⩾22.0	⩾23.0	⩾23.0	⩾23.0
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)		Y2/Y3/Y4Y5:1695-2690			
		1695-1920	1920-2200	2200-2490	2490-2690
Gain (dBi)	at middle tilt	17.2	17.5	17.7	17.9
	over all tilt	17.0±0.7	17.3±0.5	17.5±0.5	17.7±0.7
Polarization		+45°/-45°			
Horizontal -3dB Beamwidth(°)		69±6	66±6	61±6	58±6
Vertical -3dB Beamwidth(°)		7.1±0.7	6.3±0.6	5.3±0.5	4.8±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
Cross Polar Ratio (±60°)(dB)	⩾8.0	⩾7.0	⩾6.0	⩾6.0
Front to Back Ratio, ±30°(dB)	＞23	＞24	＞24	＞23
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 Input Power per Port (W)	200 (at 50℃ ambient temperature)			

General parameters	Frequency range (MHz)		Y1:2300-2690
	Polarization		+45°, -45°
	Electrical downtilt (°)		2-12, continuously adjustable
	Grounding		DC Ground
Calibration and electrical parameters	Coupling factor between calibration port and each RF port (dB)		-26±2
	Max. amplitude tolerance from calibration port to RF ports (dB)		≤1.0
	Max. phase tolerance from calibration port to RF ports (°)		≤10
	VSWR		≤1.5
	Co-polarization isolation between ports (dB)		≥20
	Cross-polarization isolation between ports (dB)		≥23
	Max Input Power per Port (W)		50(at 50℃ ambient temperature)
	PIM3 (2×43 dBm carrier)(dBc)		⩽-120
	Single column beam	Gain Overall Tilts (dBi)	16.0±1.0
		Horizontal 3dB beam width (°)	80±15
		Vertical 3dB beam width (°)	5.5±0.8
		Cross polar ratio (0°) (dB)	≥15
		1st upper side lobe suppression above main beam (dB)	≥15
		Front to back ratio (dB)	≥21
	65° Broadcast beam	Gain Overall Tilts (dBi)	16.5±1.0
		Horizontal 3dB beam width (°)	≥60
		Vertical 3dB beam width (°)	5.5±0.8
		1st upper side lobe suppression above main beam (dB)	≥15
		Front to back ratio (dB)	≥23
	Service beam	0° direction beam gain (dB)	21.5±1.0
		0° direction beam horizontal 3dB beam width (°)	≥18
		0° direction beam vertical 3dB beam width (°)	5.5±0.8
		30° direction beam gain (dB)	19.0±1.0
		30° direction beam horizontal 3dB beam width (°)	≥20
		30° direction beam vertical 3dB beam width (°)	5.5±0.8

		1st upper side lobe suppression above main beam (dB)	≥15
		Front to back ratio (dB)	≥23

Values based on NGMN-N-P-BASTA V12.0

A member of

Certifications

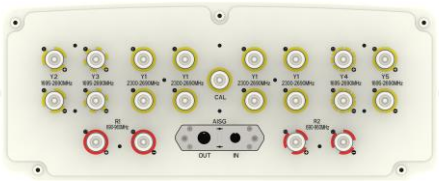
Mechanical Properties	
Radome Material	Fiberglass
Radome Colour	Light Grey
Connector Type	4.3-10(F)×21
Antenna Dimension (H×W×D)(mm)	2700×499×205
Packing Size (H×W×D)(mm)	2885×534×240
Antenna Net Weight (approx.) (kg)	49
Installation Kit Weight(kg)	5.6 (2 units)
Mechanical Downtilt(°)	0-8
Mast Diameter Supported(mm)	50-114
Pole Length(mm)	>2500
Operating Temperature(℃)	-40-+65
Wind Load (at 150 km/h)	1900/781/1900N(Frontal/Lateral/Rear side)
Maximum Wind Speed (km/h)	200

RET Properties	
Power Supply	10-30V dc
Power Consumption	≤2W (Idle), ≤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

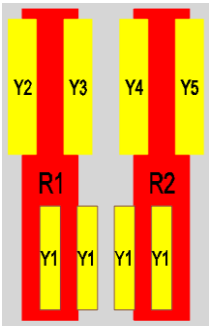
Product Specification

Lightning Protection Rate	IEC 61000-4-5 Current Pulse Profile, 8/20 μs Min. @8kA±5 Repetitions
Connectors	2 Circle Connector According to IEC 60130-9 and AISG. Daisy Chain In: Male, Daisy Chain Out: Female

Antenna Ports

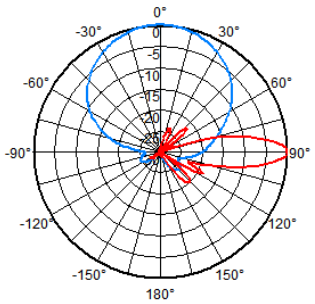


Array Layout

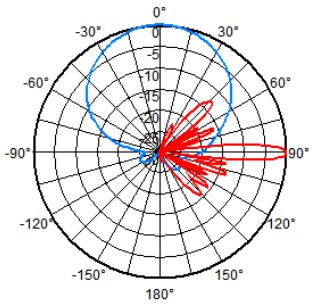


Reference Radiation Patterns

690-960MHz(65 deg)

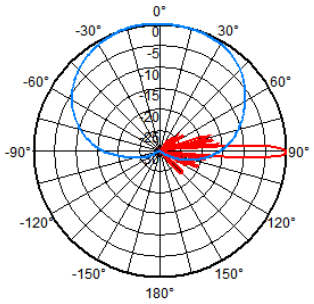


1695-2690MHz(65 deg)

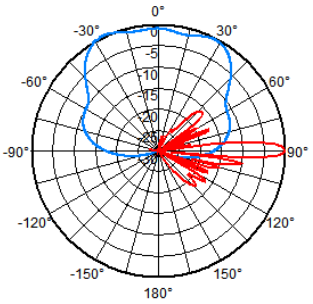


2300-2690MHz(8T8R)

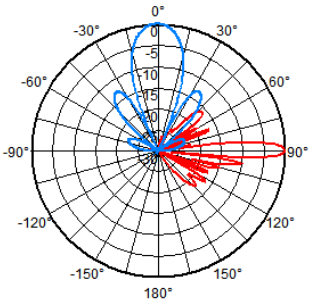
Column beam



Broadcast beam



0° Service beam



30° Service beam