

Antennas
Cellular Panel Antennas

16-Port Antenna
Frequency Range
HBPW
Gain
Tilt

R1	R2	Y1	Y2	Y3	Y4	Y5	Y6
698-960	698-960	1710-2690	1710-2690	1427-2690	1710-2690	1710-2690	1710-2690
65	65	65	65	65	65	65	65
16.5	16.5	18	17.5	18	17.5	18	17.5
2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12

Model Number		CP16-2L6M-65-17/18RT-1B					
Electrical specifications		R1,R2					
Frequency Range(MHz)		698-960					
		698-806		790-894		880-960	
Gain(dBi)	at mid Tilt	16.0		16.3		16.6	
	over all Tilts	15.8±0.6		16.1±0.6		16.4±0.6	
Horizontal Pattern:							
Azimuth Beamwidth(°)		66±6.5		60±5.6		57±4.6	
Front to back RatioCo-polar, ±30°(dB)		>25		>25		>25	
Cross Polar Discriminationat Boresight(dB)		>18		>18		>18	
Vertical Pattern:							
Elevation Beamwidth(°)		8.2±0.9		7.4±0.6		6.8±0.7	
Electrical Downtilt(°)		2-12, continuously adjustable					
First Upper Side Lobe Suppression(Typ.) (dB)		>15		>15		>15	
Cross-Polar Isolation (dB)		> 25					
Port to Port Isolation (dB)		> 25(R1//R2), > 28 (R1,R2//Y1,Y2,Y3,Y4,Y5,Y6)					
Max. Average Input Power per Port (W)		250					

Preliminary values based on NGMN-P-BASTA V12.0



Model Number		CP16-2L6M-65-17/18RT-1A				
Y1, Y5						
Frequency Range(MHz)		1710-2690				
		1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Gain(dBi)	at mid Tilt	16.4	16.8	17.0	17.4	17.6
	over all Tilts	16.2±0.5	16.6±0.5	16.8±0.5	17.2±0.5	17.4±0.5
Horizontal Pattern:						
Azimuth Beamwidth(o)		68±6.5	65±6.5	62±6.5	58±5.0	58±6.5
Front to back Ratio, ±30°(dB)		≥25	≥25	>25	≥25	≥25
Cross Polar Discrimination at Boresight(dB)		>16	>16	>17	>18	>18
Vertical Pattern:						
Elevation Beamwidth(o)		7.4±0.5	6.8±0.4	6.4±0.5	5.9±0.5	5.4±0.6
Electrical Downtilt(o)		2-12, continuously adjustable				
First Upper Side Lobe Suppression (dB)		>15	>15	>15	>15	>15
Cross-Polar Isolation (dB)		> 26				
Port to Port Isolation (dB)		> 26				
Max. Average Input Power per Port (W)		200				

Preliminary values based on NGMN-P-BASTA V12.0

Y3						
Frequency Range(MHz)		1427-2690				
		1427-1518	1710-1920	1920-2170	2300-2400	2490-2690
Gain(dBi)	at mid Tilt	15.4	16.5	17.2	17.2	17.4
	over all Tilts	15.2±0.6	16.3±0.5	17.0±0.5	17.0±0.6	17.2±0.6
Horizontal Pattern:						
Azimuth Beamwidth(°)		60±8.0	62±6.5	62±6.5	64±5.0	58±5.5
Front to back Ratio Co-polar, ±30°(dB)		>25	>25	>25	>25	>25
Cross Polar Discrimination at Boresight (dB)		>16	>16	>16	>16	>16
Vertical Pattern:						
Vertical-3dB Beamwidth (°)		9.1±0.6	7.2±0.8	6.4±0.6	5.9±0.5	5.4±0.6
Electrical Downtilt (°)		2-12, continuously adjustable				
First Upper Side Lobe Suppression (dB)		>15	>15	>15	>15	>15
Cross-Polar Isolation (dB)		> 26	> 26			
Port to Port Isolation (dB)		> 26	> 26			
Max. Average Input Power per Port (W)		200				

Preliminary values based on NGMN-P-BASTA V12.0

		Y2, Y4, Y6				
Frequency Range(MHz)		1710-2690				
		1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Gain(dBi)	at mid Tilt	16.2	16.6	16.8	17.2	17.2
	over all Tilts	16.0±0.5	16.4±0.5	16.6±0.5	17.0±0.5	17.0±0.5
Horizontal Pattern:						
Azimuth Beamwidth(o)		68±6.5	65±6.5	62±6.5	58±5.0	58±6.5
Front to back Ratio, ±30°(dB)		≥25	≥25	>25	≥25	≥25
Cross Polar Discrimination at Boresight(dB)		>16	>16	>17	>18	>18
Vertical Pattern:						
Elevation Beamwidth(o)		6.8±0.5	6.4±0.4	6.0±0.5	5.2±0.5	4.8±0.6
Electrical Downtilt(o)		2-12, continuously adjustable				
First Upper Side Lobe Suppression (dB)		>15	>15	>15	>15	>15
Cross-Polar Isolation (dB)		> 26				
Port to Port Isolation (dB)		> 26				
Max. Average Input Power per Port (W)		200				

Preliminary values based on NGMN-P-BASTA V12.0

Electrical specifications, all systems:	
Polarization	+45° /-45°
Impedance (Ω)	50
VSWR	<1.5
Return Loss (dB)	> 14
PIM3 (2x43 dBm carrier) (dBc)	<-150
Lightning Protection	DC Ground

Preliminary values based on NGMN-P-BASTA V12.0

Mechanical Specifications

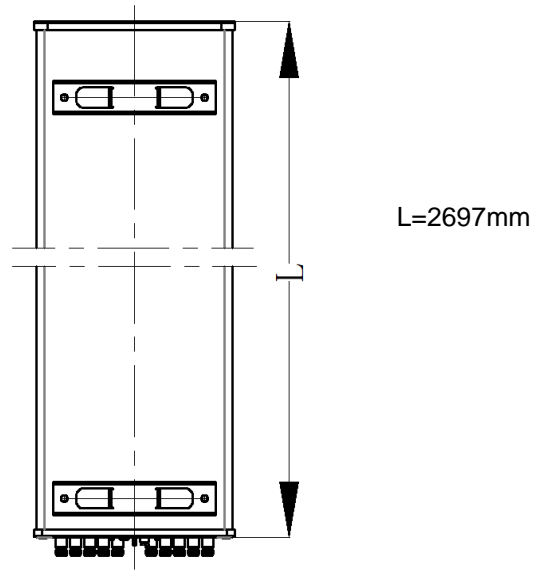
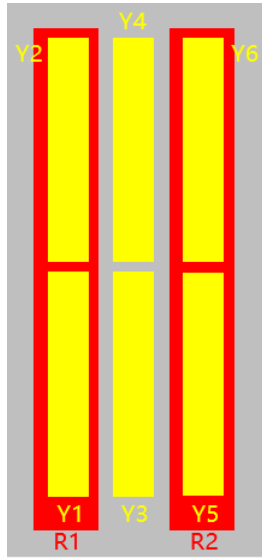
Connector Type	4.3/10(F) x 16
Connector position	Bottom
Electrical Tilt Control	Integrated RET, Each Band Individually Adjustable
Mechanical Tilt Range(°)	0-10
Radome Material	Fiberglass
Antenna Weight(kg)	40/45.5 (clamps incl.)
Bracket Diameter(mm)	50-125
Maximum Wind Speed(km/h)	200
Wind Load frontal [N] at 150 Km/h	800
Wind Load rear [N] at 150 Km/h	755
Wind Load lateral [N] at 150 Km/h	335
Operating Temperature (°C)	-40 ~+60
Antenna Dimensions (H x W x D) (mm)	2697x469x205
Packing Size (H x W x D) (mm)	2930x544x280

Integrated RET Specifications

Protocols	Compliant With AISGV2.0 And 3GPP
Supply Voltage, VDC	10-30DC
Power Consumption	<2W (standby); < 10W (motor active)
Safety Standard	Compliant to EN 60950/UL 60950/ RoHs (Restriction of Hazardous Substances), CE
Lightning Protection Rating	IEC 61000-4-5 Current Pulse Profile, Line to Ground 8/20 us @ 6kA ≥±5 Repetitions Line to line , 8/20 us @ 3kA ≥±5 Repetitions
Connectors	2 x 8 Pins Connector According To IEC60130-9 AND AISG 1 x Daisy Chain In : Male 1 x Daisy Chain Out : Female Pin3:RS485B; Pin5:RS485A; Pin6:10~30V; Pin7: DC return Female connector: 4 PINs ,Male connector: 4 PINs

Preliminary values based on NGMN-P-BASTA V12.0

Arrays of the antenna



Ports of the antenna

