

Multiband Base Station Antenna

Model No.: H-BDX-0203-1617-065-DCT-DF/EF



	R1	R2	Y1	Y2	Y3	Y4
Frequency range	698-960	698-960	1695-2690	1695-2690	1695-2690	1695-2690
HBW	65	65	65	65	65	65
Gain	17	17	17.5	18	17.5	18
Downtilt range	2-12	2-12	2-12	2-12	2-12	2-12

Electrical specifications

R1, R2

Frequency Range(MHz)		698-960		
		698-824	806-896	880-960
Gain(dBi)	at mid Tilt	15.6	16.5	16.8
	over all Tilts	15.4±0.5	16.2±0.5	16.6±0.4
Azimuth Beamwidth(°)		68±4.4	65±3.6	60±4.6
Front to back Ratio(dB)		>24	>25	>25
CPR @ Boresight(dB)		>18	>18	>18
Azimuth Beam Port-to-Port Tracking(dB)		<2.0	<2.5	<2.5
Azimuth beam squint(°)		<5	<5	<5
Elevation Beamwidth(°)		9.0±0.6	8.2±0.6	7.5±0.6
Electrical Downtilt(°)		2-12, continuously adjustable		
Tilt Accuracy(°)		<0.6	<0.5	<0.5
Upper Side Lobe Suppression(Typ.) (dB)		>15	>15	>15
Cross-Polar Isolation (dB)		> 28		
Port to Port Isolation (dB)		> 28		
Max. Average Input Power per Port (W)		350(at 50°C ambient temperature)		

Y1, Y3

Frequency Range(MHz)		1695-2690				
		1695-1880	1850-1990	1920-2170	2300-2400	2500-2690
Gain(dBi)	at mid Tilt	16.8	17.1	17.4	17.3	17.3
	over all Tilts	16.8±0.6	17.1±0.5	17.4±0.4	17.3±0.4	17.3±0.5
Azimuth Beamwidth(°)		67±3.4	65±3.2	66±4.4	65±4.5	64±4.7
Front to back Ratio(dB)		≥25	≥24	>24	≥26	≥26

All specifications are subject to change without any notice. Please contact us for the latest information.

CPR @ Boresight(dB)	>18	>19	>19	>18	>18
Azimuth Beam Port-to-Port Tracking(dB)	<1.9	<1.9	<2.2	<2.2	<2.5
Azimuth beam squint(°)	<5	<5	<5	<5	<5
Elevation Beamwidth(°)	7.4±0.4	6.8±0.4	6.1±0.5	5.7±0.3	5.2±0.4
Electrical Downtilt(°)	2-12, continuously adjustable				
Tilt Accuracy(°)	<0.6	<0.6	<0.5	<0.5	<0.6
Upper Side Lobe Suppression(Typ.) (dB)	>16	>16	>16	>16	>16
Cross-Polar Isolation (dB)	> 28				
Port to Port Isolation (dB)	> 28				
Max. Average Input Power per Port (W)	250(at 50°C ambient temperature)				

Y2, Y4

Frequency Range(MHz)		1695-2690				
		1695-1880	1850-1990	1920-2170	2300-2400	2500-2690
Gain(dBi)	at mid Tilt	17.0	17.4	17.6	17.8	17.6
	over all Tilts	17.0±0.6	17.3±0.5	17.5±0.4	17.7±0.3	17.4±0.4
Azimuth Beamwidth(°)		66±3.6	64±3.2	66±3.5	65±3.4	64±5.2
Front to back Ratio(dB)		>25	>24	>24	>26	>26
CPR @ Boresight(dB)		>18	>21	>20	>18	>18
Azimuth Beam Port-to-Port Tracking(dB)		<2.1	<2.0	<2.0	<2.3	<2.4
Azimuth beam squint(°)		<5	<5	<5	<5	<5
Elevation Beamwidth(°)		7.4±0.4	6.8±0.4	6.1±0.5	5.7±0.3	5.2±0.4
Electrical Downtilt(°)		2-12, continuously adjustable				
Tilt Accuracy(°)		<0.6	<0.6	<0.6	<0.6	<0.7
Upper Side Lobe Suppression(Typ.) (dB)		>16	>16	>16	>16	>16
Cross-Polar Isolation (dB)		> 28				
Port to Port Isolation (dB)		> 28				
Max. Average Input Power per Port (W)		250(at 50°C ambient temperature)				

Electrical Specifications for All Systems

Polarization	+45° /-45°
Impedance (Ω)	50
VSWR / Return loss(dB)	<1.5 / 14
Inter-band Isolation (dB)	>28
PIM 3 rd @ 2*20W (dBc)	<-150
Lightning Protection	DC Ground

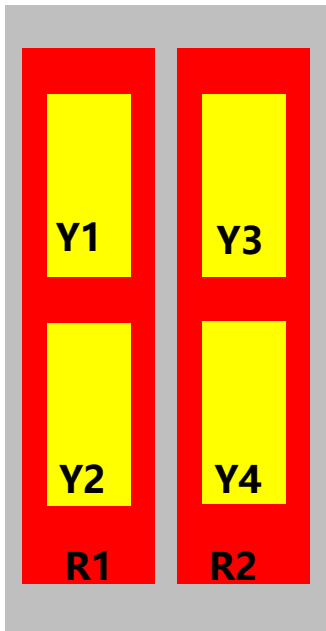
Mechanical Specifications

Connector Type	4.3/10(F) x 12
Connector position	Bottom
Electrical Tilt Control	Integrated RET, Each Band Individually Adjustable
Mechanical Tilt Range	0-10

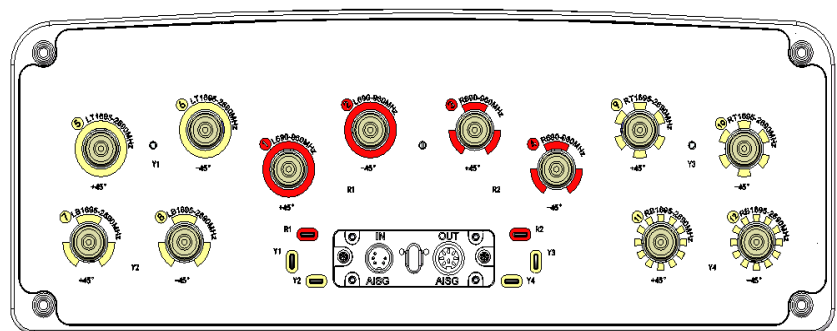
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Radome Material	Fiberglass
Antenna Weight(kg)	44(clamps excl.) / 50(clamps incl.)
Bracket Diameter(mm)	50-120
Maximum Wind Speed(km/h)	200
Wind Load @ 150 Km/h Frontal, N	1400
Wind Load @ 150 Km/h Rear side, N	1565
Antenna Dimensions, HxWxD, mm	2750x467x167
Packing Dimensions, HxWxD, mm	2950x562x287

Preliminary values based on NGMN-P-BASTA V10.0



Arrays of the antenna



Ports of the antenna