

Electrical Specifications

Frequency Range (MHz):	Beam 1 (Y1, Port 1/2)					
	1695-1880	1880-2025	2025-2300	2300-2450	2450-2550	2550-2690
Gain (dBi):	18.8±2.1	20.8±0.4	21.7±0.7	21.7±0.7	21.6±0.5	21.4±0.6
Horizontal 3dB Beamwidth (°):	13.5±2.5	11±0.8	9±1.5	8±0.9	7.6±0.5	7.3±0.6
Vertical 3dB Beamwidth (°):	14.1±1.2	12.7±0.8	11.1±1.3	10.3±0.9	9.9±0.5	9.9±0.5
Horizontal Beam Pointing (°):	46	41	35	32	31	30
Electrical Downtilt (°):	6.0 Fixed					
Upper Side Lobe Suppression, Peak to 30°(dB):	18	18	17	17	17	17
Front to Back Ratio (dB):	25	30	32	31	30	30
CPR at boresight (dB):	12	19	22	19	20	16

Frequency Range (MHz):	Beam 2 (Y2, Port 3/4)					
	1695-1880	1880-2025	2025-2300	2300-2450	2450-2550	2550-2690
Gain (dBi):	21±1.2	21.8±0.4	22.2±0.6	22±0.8	21.8±1.1	21.8±0.8
Horizontal 3dB Beamwidth (°):	10.3±0.9	9.2±0.6	7.8±1.2	7.2±0.6	7.1±0.5	6.8±0.6
Vertical 3dB Beamwidth (°):	14.1±1.2	12.8±0.8	11.2±1.4	10.5±0.7	10.3±0.7	10±0.6
Horizontal Beam Pointing (°):	26	24	20	19	18	18
Electrical Downtilt (°):	6.0 Fixed					
Upper Side Lobe Suppression, Peak to 30°(dB):	18	18	17	17	17	17
Front to Back Ratio (dB):	32	30	31	31	31	31
CPR at boresight (dB):	20	20	22	20	15	16

Frequency Range (MHz):	Beam 3 (Y3, Port 5/6)					
	1695-1880	1880-2025	2025-2300	2300-2450	2450-2550	2550-2690
Gain (dBi):	21.5±1.0	22.1±0.5	22.3±0.6	22.2±0.8	22.1±0.7	22±0.7
Horizontal 3dB Beamwidth (°):	9.5±0.9	8.5±0.6	7.5±0.9	7.0±0.6	6.7±0.5	6.5±0.6
Vertical 3dB Beamwidth (°):	14.3±1.4	12.9±0.9	11.2±1.3	10.5±0.7	10.2±0.6	10.1±0.6
Horizontal Beam Pointing (°):	8	8	7	6	6	6
Electrical Downtilt (°):	6.0 Fixed					
Upper Side Lobe Suppression, Peak to 30°(dB):	18	18	18	18	17	18
Front to Back Ratio (dB):	30	28	31	31	30	30
CPR at boresight (dB):	16	19	20	21	21	19

Frequency Range (MHz):	Beam 4 (Y4, Port 7/8)					
	1695-1880	1880-2025	2025-2300	2300-2450	2450-2550	2550-2690
Gain (dBi):	21.5±1.0	22.1±0.5	22.4±0.6	22.3±0.8	22.2±0.7	22±0.7
Horizontal 3dB Beamwidth (°):	9.5±0.9	8.5±0.6	7.5±0.9	7.0±0.6	6.7±0.5	6.5±0.6
Vertical 3dB Beamwidth (°):	14.2±1.4	12.9±0.9	11.2±1.3	10.5±0.7	10.2±0.6	10.2±0.6
Horizontal Beam Pointing (°):	-8	-7	-7	-6	-6	-6
Electrical Downtilt (°):	6.0 Fixed					
Upper Side Lobe Suppression, Peak to 30°(dB):	18	18	18	18	18	18
Front to Back Ratio (dB):	30	29	31	32	31	30
CPR at boresight (dB):	16	19	20	19	18	19

Frequency Range (MHz):	Beam 5 (Y5, Port 9/10)					
	1695-1880	1880-2025	2025-2300	2300-2450	2450-2550	2550-2690
Gain (dBi):	21±1.2	21.6±1.0	22.2±0.6	22.1±0.8	21.9±1.0	21.9±0.8
Horizontal 3dB Beamwidth (°):	10.3±0.9	9.3±0.9	7.8±1.2	7.2±0.6	7.1±0.5	6.8±0.6
Vertical 3dB Beamwidth (°):	14.2±1.3	12.8±0.8	11.2±1.4	10.5±0.7	10.3±0.7	10±0.6
Horizontal Beam Pointing (°):	-26	-24	-20	-19	-18	-17
Electrical Downtilt (°):	6.0 Fixed					
Upper Side Lobe Suppression, Peak to 30°(dB):	18	18	18	18	18	18
Front to Back Ratio (dB):	31	30	31	32	31	31
CPR at boresight (dB):	20	20	22	20	15	16

Frequency Range (MHz):	Beam 6 (Y6, Port 11/12)					
	1695-1880	1880-2025	2025-2300	2300-2450	2450-2550	2550-2690
Gain (dBi):	18.8±2.2	20.8±0.5	21.7±0.7	21.7±0.7	21.5±0.5	21.4±0.6
Horizontal 3dB Beamwidth (°):	13.5±2.5	11±0.8	9±1.5	8±0.9	7.6±0.5	7.4±0.6
Vertical 3dB Beamwidth (°):	14.1±1.2	12.7±0.8	11.1±1.3	10.3±0.9	9.9±0.5	9.9±0.5
Horizontal Beam Pointing (°):	-46	-41	-35	-32	-31	-30
Electrical Downtilt (°):	6.0 Fixed					
Upper Side Lobe Suppression, Peak to 30°(dB):	17	18	17	18	18	17
Front to Back Ratio (dB):	27	30	32	30	28	30
CPR at boresight (dB):	12	19	22	16	16	13

Frequency Range (MHz):	Beam 1 (P1, Port 13/14; P7, Port 25/26)		
	3300-3600	3600-3800	3800-4200
Gain (dBi):	20.5±0.6	20.9±0.5	20.8±0.9
Horizontal 3dB Beamwidth (°):	10±0.9	9.4±0.6	8.4±1.1
Vertical 3dB Beamwidth (°):	11.8±0.9	10.9±0.8	10.2±0.9
Horizontal Beam Pointing (°):	34	32	29
Electrical Downtilt (°):	6.0 Fixed		
Upper Side Lobe Suppression, Peak to 30°(dB):	19	18	18
Front to Back Ratio (dB):	30	31	28
CPR at boresight (dB):	14	19	17

Frequency Range (MHz):	Beam 2 (P2, Port 15/16; P8, Port 27/28)		
	3300-3600	3600-3800	3800-4200
Gain (dBi):	21.5±0.6	21.4±0.6	21±0.9
Horizontal 3dB Beamwidth (°):	9±0.6	8.5±0.6	7.6±0.8
Vertical 3dB Beamwidth (°):	11.8±0.8	10.9±0.6	10.3±0.8
Horizontal Beam Pointing (°):	20	18	17
Electrical Downtilt (°):	6.0 Fixed		
Upper Side Lobe Suppression, Peak to 30°(dB):	19	18	18
Front to Back Ratio (dB):	30	31	32
CPR at boresight (dB):	17	20	19

Frequency Range (MHz):	Beam 3 (P3, Port 17/18; P9, Port 29/30)		
	3300-3600	3600-3800	3800-4200
Gain (dBi):	21.6±0.6	21.4±0.8	21.1±0.7
Horizontal 3dB Beamwidth (°):	8.6±0.6	8.1±0.6	7.4±0.8
Vertical 3dB Beamwidth (°):	12.1±0.9	11.2±0.8	10.5±0.8

Horizontal Beam Pointing (°):	7	6	6
Electrical Downtilt (°):	6.0 Fixed		
Upper Side Lobe Suppression, Peak to 30°(dB):	19	18	18
Front to Back Ratio (dB):	30	30	31
CPR at boresight (dB):	18	19	19

Frequency Range (MHz):	Beam 4 (P4, Port 19/20; P10, Port 31/32)		
	3300-3600	3600-3800	3800-4200
Gain (dBi):	21.5±0.6	21.4±0.8	21.1±0.7
Horizontal 3dB Beamwidth (°):	8.6±0.6	8.1±0.6	7.4±0.8
Vertical 3dB Beamwidth (°):	11.5±0.9	10.8±0.9	10.1±0.8
Horizontal Beam Pointing (°):	-7	-6	-6
Electrical Downtilt (°):	6.0 Fixed		
Upper Side Lobe Suppression, Peak to 30°(dB):	17	18	17
Front to Back Ratio (dB):	30	30	30
CPR at boresight (dB):	18	19	19

Frequency Range (MHz):	Beam 5 (P5, Port 21/22; P11, Port 33/34)		
	3300-3600	3600-3800	3800-4200
Gain (dBi):	21.5±0.6	21.5±0.6	21.1±0.9
Horizontal 3dB Beamwidth (°):	9±0.6	8.5±0.6	7.6±0.8
Vertical 3dB Beamwidth (°):	11.8±0.8	10.9±0.6	10.3±0.8
Horizontal Beam Pointing (°):	-20	-18	-17
Electrical Downtilt (°):	6.0 Fixed		
Upper Side Lobe Suppression, Peak to 30°(dB):	19	18	18
Front to Back Ratio (dB):	30	31	32
CPR at boresight (dB):	17	20	20

Frequency Range (MHz):	Beam 6 (P6, Port 23/24; P12, Port 35/36)		
	3300-3600	3600-3800	3800-4200
Gain (dBi):	20.4±1.0	21.1±0.5	21±0.9
Horizontal 3dB Beamwidth (°):	10.1±0.9	9.4±0.6	8.5±1.0
Vertical 3dB Beamwidth (°):	11.9±0.8	10.8±0.8	10.2±0.8
Horizontal Beam Pointing (°):	-34	-32	-29
Electrical Downtilt (°):	6.0 Fixed		
Upper Side Lobe Suppression, Peak to 30°(dB):	19	18	18
Front to Back Ratio (dB):	30	30	29
CPR at boresight (dB):	14	19	18

Frequency Range (MHz):	All Beams (Port 1 to 36)	
	Hexa-Beam(1695-2690) (Y1,Y2,Y3,Y4,Y5,Y6)	Hexa-Beam(3300-4200) (P1,P2,P3,P4,P5,P6,P7,P8,P9,P10,P11,P12)
Return Loss (dB):	>14 (VSWR<1.5)	
Polarization:	±45°	
Cross Polar Isolation (dB):	>25	>25
Beam to beam Isolation(dB):	>16	>16
Max. Power Per Port (W):	200	100
Total Power for the Antenna(W):	800	
Intermodulation IM3 (dBc):	<-150 (2x43 dBm)	

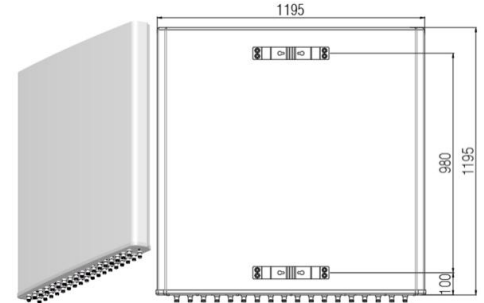


Impedance (ohm):	50
Lightning Protection:	DC Grounded
Connector Type:	36x4.3-10 Female

Values based on NGMN recommendations on Base Station Antenna Standards(BASTA).

Mechanical Data

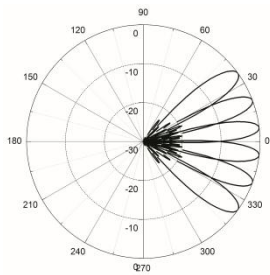
Antenna Dimensions (mm):	1195×1195×136
Packing Dimensions (mm):	1440×1335×240
Antenna Net Weight/Bracket (kg):	50/5.7
Antenna Gross Weight (kg):	64.5
Radome Material:	Fiberglass
Pipe OD (mm):	70-115
Mounting Kits (Included):	BA.K.04.00069491, Adjustable Downtilt 0°-16° (0°-16° in 2° steps)



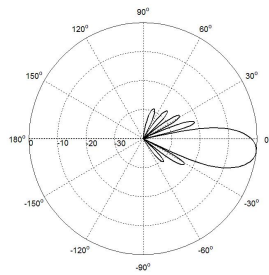
Environmental Ratings

Humidity:	95%RH@+30℃
Temperature (℃):	-40~+70
Wind Load @150 km/h (N):	Frontal/Lateral/Rearside: 1756/56/1789
Max. Wind velocity(km/h):	200

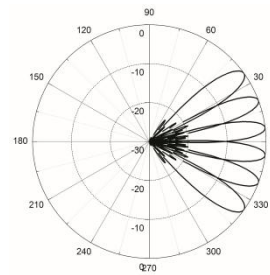
Typical Patterns



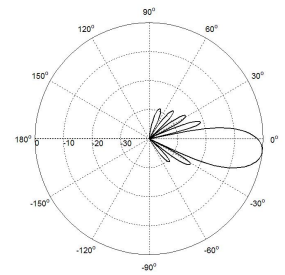
Azimuth(1695-2690MHz)



Elevation(1695-2690MHz)

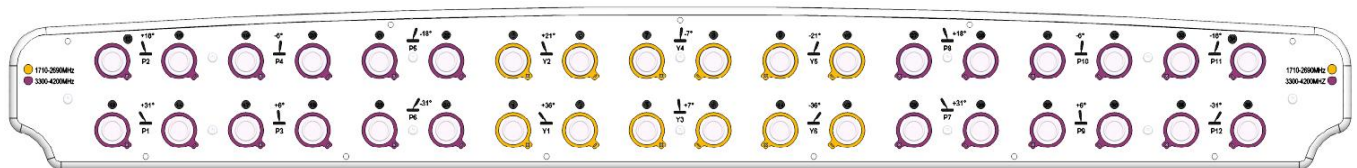


Azimuth(3300-4200MHz)



Elevation(3300-4200MHz)

Bottom View



Correlation Table

Frequency range	Array	Horizontal Beam Pointing(°)	Connector
1710-2690MHz	Y1	+36	1-2
1710-2690MHz	Y2	+21	3-4
1710-2690MHz	Y3	+7	5-6
1710-2690MHz	Y4	-7	7-8
1710-2690MHz	Y5	-21	9-10
1710-2690MHz	Y6	-36	11-12
3300-4200MHz	P1	+31	13-14
3300-4200MHz	P2	+18	15-16
3300-4200MHz	P3	+6	17-18
3300-4200MHz	P4	-6	19-20
3300-4200MHz	P5	-18	21-22
3300-4200MHz	P6	-31	23-24
3300-4200MHz	P7	+31	25-26
3300-4200MHz	P8	+18	27-28
3300-4200MHz	P9	+6	29-30
3300-4200MHz	P10	-6	31-32
3300-4200MHz	P11	-18	33-34
3300-4200MHz	P12	-31	35-36

