

8-Port Antenna	R1	R2	B1	B2
Frequency Range	617-746	617-746	1695-2200	1695-2200
Dual Polarization	X	X	X	X
HPBW	65°	65°	60°	60°
Gain	16dBi	16dBi	18dBi	18dBi
Adjust. Electr. DT set by <i>FlexRET</i>	1°-10°	1°-10°	0°-10°	0°-10°



8-Port Antenna 2LB/2HB 8ft 65°/60° | 2x617-746 16dBi | 2x1695-2200 18dBi

Type No.		80040066			
Lowbands		R1, connector 1-2		R2, connector 3-4	
		617-746		617-746	
Frequency Range	MHz	617 – 698	698 – 746	617 – 698	698 – 746
Gain at mid Tilt	dBi	15.6	16.2	15.6	16.2
Horizontal Pattern:					
Azimuth Beamwidth	°	60	58	60	58
Front-to-Back Ratio, Total Power, ± 30°	dB	> 24	> 22	> 24	> 22
Cross Polar Discrimination at Boresight	dB	> 25	> 24	> 25	> 24
Cross Polar Discrimination over Sector	dB	> 10	> 10	> 10	> 10
Vertical Pattern:					
Elevation Beamwidth	°	10	9.4	10	9.4
Electrical Downtilt continuously adjustable	°	1.0 – 10.0		1.0 – 10.0	
Tilt Accuracy	°	< 0.5	< 0.5	< 0.5	< 0.5
First Upper Side Lobe Suppression	dB	> 15	> 15	> 15	> 15
Cross Polar Isolation	dB	> 25		> 25	
Port to Port Isolation	dB	> 25 (R1 // R2) > 28 (R1 // B1, B2)		> 25 (R2 // R1) > 28 (R2 // B1, B2)	
Max. Effective Power per Port	W	250 (at 50 °C ambient temperature)		250 (at 50 °C ambient temperature)	

Values based on NGMN-P-BASTA (version 9.6) requirements.

Highbands		B1, connector 5-6			B2, connector 7-8		
			1695-2200			1695-2200	
Frequency Range	MHz	1695 – 1880	1850 – 1990	1920 – 2200	1695 – 1880	1850 – 1990	1920 – 2200
Gain at mid Tilt	dBi	18.2	18.7	18.3	18.2	18.7	18.3
Horizontal Pattern:							
Azimuth Beamwidth	°	62	57	57	62	57	57
Front-to-Back Ratio, Total Power, ± 30°	dB	> 25	> 25	> 25	> 25	> 25	> 25
Cross Polar Discrimination at Boresight	dB	> 25	> 23	> 21	> 25	> 23	> 21
Cross Polar Discrimination over Sector	dB	> 10	> 10	> 8	> 10	> 10	> 8
Vertical Pattern:							
Elevation Beamwidth	°	5.6	5.2	5.0	5.6	5.2	5.0
Electrical Downtilt continuously adjustable	°	0.0 – 10.0			0.0 – 10.0		
Tilt Accuracy	°	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
First Upper Side Lobe Suppression	dB	> 16	> 16	> 16	> 16	> 16	> 16
Cross Polar Isolation	dB	> 25			> 25		
Port to Port Isolation	dB	> 25 (B1 // B2) > 28 (B1 // R1, R2)			> 25 (B1 // B2) > 28 (B1 // R1, R2)		
Max. Effective Power per Port	W	250 (at 50 °C ambient temperature)			250 (at 50 °C ambient temperature)		

Values based on NGMN-P-BASTA (version 9.6) requirements.

Electrical specifications, all systems		
Impedance	Ω	50
VSWR		< 1.5
Return Loss	dB	> 14
Passive Intermodulation	dBc	< -153 (2 x 43 dBm carrier)
Polarization	$^\circ$	+45, -45
Max. Effective Power for the Antenna	W	800 (at 50 °C ambient temperature)

Values based on NGMN-P-BASTA (version 9.6) requirements.

Mechanical specifications		
Input	8 x 4.3-10 female	
Connector Position	bottom	
Adjustment Mechanism	Non-Removable FlexRET, continuously adjustable	
Wind load (at Rated Wind Speed: 150 km/h)	N lbf	Frontal: 1590 357 Maximal: 1750 393
Max. Wind Velocity	km/h mph	241 150
Height / Width / Depth	mm inches	2399 / 576 / 166 94.4 / 22.7 / 6.5
Category of Mounting Hardware	XH (X-Heavy)	
Weight	kg lb	45.0 / 57.0 (clamps, offset incl.) 99.0 / 125.7 (clamps, offset incl.)
Packing Size	mm inches	2600 / 600 / 220 102.4 / 23.6 / 8.7
Scope of Supply	Panel, FlexRET, Offset and 2 units of clamps for 55-115 mm 2.2-4.5 inches diameter	

Accessories (order separately if required)

Type No.	Description	Remarks mm inches	Weight approx. kg lb	Units per antenna
85010097	2 clamps	Mast diameter: 110 – 220 4.3 – 8.7	9.4 20.7	1
85010099	1 downtilt kit	Downtilt angle: 0° – 12°	10.6 23.4	1
86010154	Site Sharing Adapter	3-way (see figure below)	0.7 1.5	
86010155	Site Sharing Adapter	6-way (see figure below)	1.4 3.1	
86010162	Gender Adapter	Solely to be used in combination with the FlexRET module 86010153v01	0.045 0.099	1
86010163	Port Extender		0.16 0.35	1

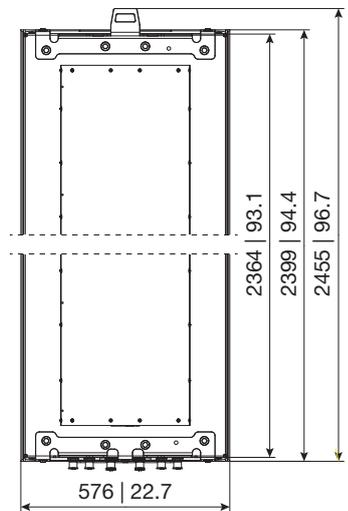
Accessories (included in the scope of supply)

85010096	2 clamps	Mast diameter: 55 – 115 2.2 – 4.5	5.0 11.0	1
85010104	Offset		2.88 6.35	1
86010153v01	FlexRET			1

For downtilt mounting use the clamps for an appropriate mast diameter together with the downtilt kit. Wall mounting: No additional mounting kit needed.

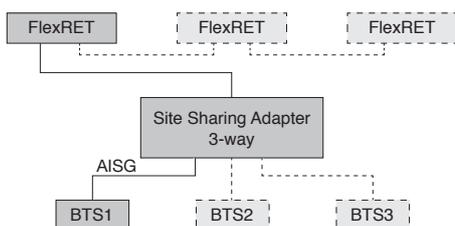
Material: **Reflector screen:** Aluminum.
Fiberglass housing: It covers totally the internal antenna components. The special design reduces the sealing areas to a minimum and guarantees the best weather protection. Fiberglass material guarantees optimum performance with regards to stability, stiffness, UV resistance and painting. The color of the radome is light grey.
All nuts and bolts: Stainless steel or hot-dip galvanized steel.

Grounding: The metal parts of the antenna including the mounting kit and the inner conductors are DC grounded.

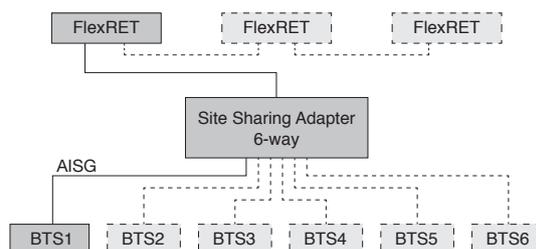


All dimensions in mm | inches

Configuration example with Site Sharing Adapter 86010154

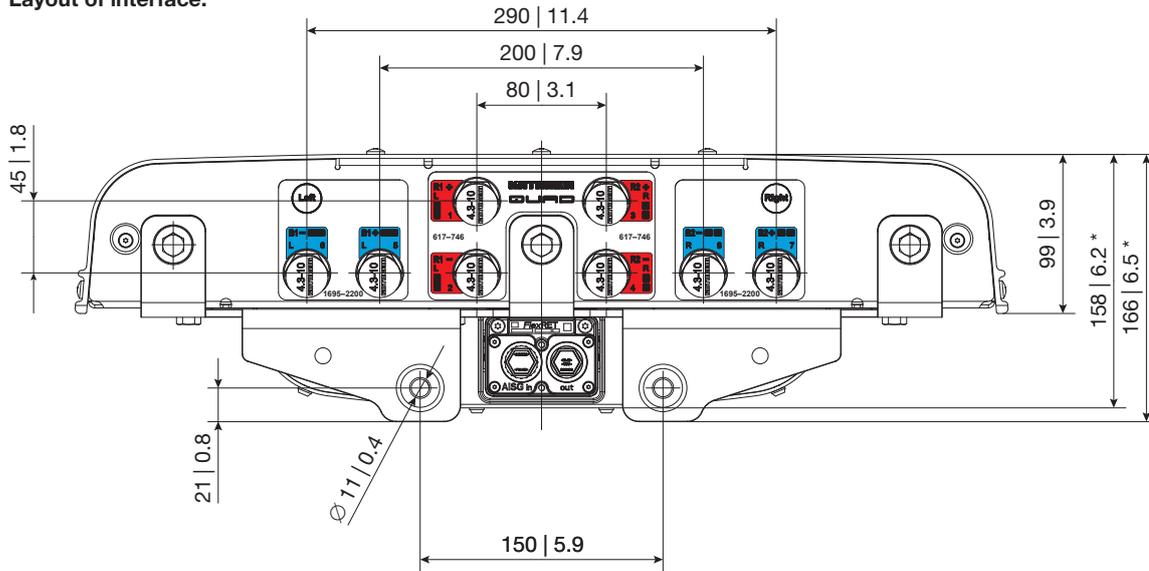


Configuration example with Site Sharing Adapter 86010155



For more information please refer to the respective data sheets.

Layout of interface:



Bottom view
 * Dimensions refer to radome
 All dimensions in mm | inches

Correlation Table

Frequency range	Array	Connector / Ports
617-746 MHz	R1	1-2
617-746 MHz	R2	3-4
1695-2200 MHz	B1	5-6
1695-2200 MHz	B2	7-8

