

**Super Antenna System Specification**

RF, electrical and mechanical specification per panel and multifloors

Lobes, Gain and KPI		Dual Beam	
Product number			
Frequency band model	MHz	Mid Band 1710-2170	High Band 2300-2690
Vertical lobe height, H=1 floor	θv°	6,2°	5,0°
Vertical lobe height, H=2 floor		3,1°	2,5°
Vertical lobe height, H=4 floor		1,6°	1,2°
Horizontal lobe connected	θh°	2 X 42°	2 X 38°
Panels sidewise for hor. lobes	N	1	1
Nr of sectors obtained/panel	qty	2	2
Nr of ports ( <i>regardless</i> of nr of floors)	qty	4	4
Radio Units required 2T2R	qty	2	2
<b>Gain/input port, L45/R45:</b>			
One floor	dBi	17	18
Two floors	dBi	20	21
Four floors	dBi	23	24
Lobes, Gain and KPI		Single Beam	
Product number			
Frequency band model	MHz	Mid Band 1710-2170	High Band 2300-2690
Vertical lobe height, H=1 floor	θv°	6,2°	5,0°
Vertical lobe height, H=2 floor		3,1°	2,5°
Vertical lobe height, H=4 floor		1,6°	1,2°
Horizontal lobe connected	θh°	1 X 42°	1 X 38°
Panels sidewise for hor. lobes	N	1	1
Nr of sectors obtained/panel	qty	2	2
Nr of ports ( <i>regardless</i> of nr of floors)	qty	4	4
Radio Units required 2T2R	qty	1	1
<b>Gain/input port, L45/R45:</b>			
One floor	dBi	18	19
Two floors	dBi	21	22
Four floors	dBi	24	25
Lobes, Gain and KPI		Quad Beam	
Product number			
Frequency band model	MHz	Mid Band 1710-2170	High Band 2300-2690
Vertical lobe height, H=1 floor	θv°	6,2°	5,0°
Vertical lobe height, H=2 floor		3,1°	2,5°
Vertical lobe height, H=4 floor		1,6°	1,2°
Horizontal lobe connected	θh°	4 X 21°	4 X 19°
Panels sidewise for hor. lobes	N	1	1
Nr of sectors obtained/panel	qty	2	2
Nr of ports ( <i>regardless</i> of nr of floors)	qty	4	4
Radio Units required 2T2R	qty	1	1
<b>Gain/input port, L45/R45:</b>			
One floor	dBi	21	22
Two floors	dBi	24	25
Four floors	dBi	27	28
F/M1 Gx x RRH ports/panel	x		(-504)
F/M2 Gx x RRH ports/EPA total	x/m2		(-2878)
<b>Mechanical Specification</b>			
EPA of Single Panel	m2		(-1)
EPA of Single Panel <i>in Cylinder</i>	m2		(-0,175)
Height/Width/Depth of Singel Panel	m		1,3/0,36/0,15
Height/Width/Depth of Two Floors	m		2,6/0,36/0,15
Height/Width/Depth of Four Floors	m		5,2/0,36/0,15
Weight of Single Panel	kg		17
Weight of Two floors	kg		34 + 13(VLSUs + HLSUs) + 10(brackets) + cables = 95
Weight of Four floors	kg		68 + 22(VLSUs + HLSUs) + 19(brackets) + small acc. = 181
Weight of Eight floors	kg		136 + 48,5(VLSUs + HLSUs) + 35(brackets) + small acc. = 369
Mounting			To mounting platform/floor steel frame w. guided 4-corner arms/jig w. 8- M6 bolts
Vertical alignment in tower			Within +/- 4 mm / 1,3 m < 0,1°. By water gauge 1,5 m long
<b>Compatibility</b>		Standards	5G, 4G, 3G, 2G
		Modulation	TDD & FDD

Note 1: Amplitude and phase grading models. Plus LL-VLSUs + HLSUs + phase cables give System total gain, vertical and horizontal sidelobes performance.