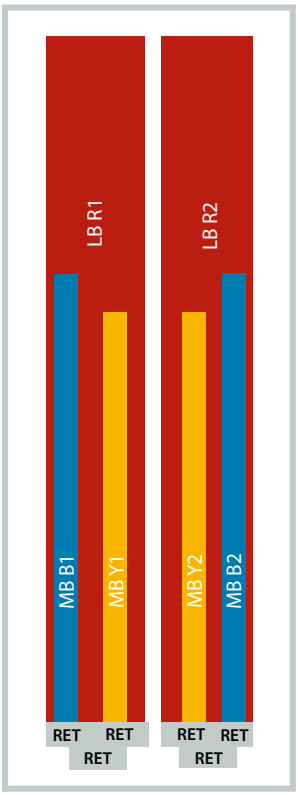
F6RHEU01

8 Port - 65deg Base Station Sector Antenna
with integrated diplexer for independent tilt of mid-band arrays



Kaelus Next Generation Base Station Antennas

- Fully integrated Remote Electrical Tilt, AISG compatible
- Supports MIMO: 4x4 on Low Band and Mid Band
- Electrical specifications as per NGMN P-BASTA version 12.0

GENERAL (BASTA)	LB R1/R2	MB B1/B2	MB Y1/Y2
Frequency Range	694-960	1695-2200	2496-2690
Gain Over All Tilts [dBi]	16.0	18.0	18.8
Polarization	X	X	X
Azimuth Beamwidth [°]	65	65	65
Electrical Downtilt Range [°]	2-12	2-11	2-12
Ports Per Band	4	4	

Specifications and Layouts

MECHANICAL SPECIFICATIONS	
Antenna Dimensions: Length, Width, Depth [inch|mm]	106.5x18.5x7.0 | 2705x470x178
Net Weight (Antenna) [lbs|kg]	81.8 | 37.2
Connector Type, R1,R2,B1/Y1,B2/Y2	4.3-10 Female
Connector Quantity, R1,R2,B1/Y1,B2/Y2	8
Connector Position	Bottom
Windload, Calculation [mph|km/h]	93.2 | 150
Windload, Frontal [lbf|N]	210 | 936
Windload, Lateral [lbf|N]	63 | 281
Survival Wind Speed [mph|km/h]	124.3 | 200
Radome Material	ASA
Radome Colour [RAL]	7035 (Light Gray)
Product Environmental Compliance	RoHS
CC distance between mounting points - Antenna [inch|mm]	103.1 | 2619
CC distance between mounting points - Bracket [inch|mm]	98.9 | 2512
Max distance on pole (lowest to highest point) - Bracket [inch|mm]	100.9 | 2562
Lightning Protection	Yes - DC Ground

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ELECTRICAL SPECIFICATIONS (BASTA)		LB R1/R2			MB B1/B2		MB Y1/Y2
Frequency Range [MHz]		703-788	814-890	890-960	1710-1880	1920-2170	2500-2690
Gain, Average [dBi]	**Min Tilt**	15.6	16.2	16.5	17.5	18.4	18.9
	Mid Tilt	15.6	16.0	16.3	17.5	18.3	19.0
	Max Tilt	15.0	14.5	15.0	17.5	18.0	18.6
Gain, Over All Tilts [dBi]		15.5 ±0.5	15.7 ±0.5	16.0 ±0.5	17.5 ±0.5	18.2 ±0.5	18.8 ±0.5
Azimuth Beamwidth, -3dB [°]		69.0 ±10.0	62.0 ±11.0	55.0 ±10.0	70.0 ±5.0	66.0 ±4.0	56.0 ±5.0
Azimuth Beamwidth, -10dB [°]		134.0 ±6.0	141.0 ±6.0	130.0 ±6.0	120.0 ±6.0	124.0 ±5.0	109.0 ±5.0
Elevation Beamwidth [°]		7.8 ±0.6	7.1 ±1.0	6.5 ±0.5	5.5 ±0.5	4.8 ±0.5	5.0 ±0.5
Electrical Downtilt [°]		2x 2-12			2x 2-11		2x 2-12
Elevation Downtilt Deviation [°]		0.5	0.5	0.5	0.5	0.5	0.5
Front-to-Back Ratio, Total Power, ±30° [dB]		17	18	18	22	22	23
First Upper Side Lobe Suppression [dB]		16	15	15	16	16	16
Upper Side Lobe Suppression [dB]		16	8	8	12	12	10
Polarization [°]		±45			±45		±45
Impedance [Ω]		50			50		50
VSWR		< 1.5:1			< 1.5:1		< 1.5:1
Return Loss [dB]		> 14.0			> 14.0		> 14.0
Cross Polar Isolation [dB]		25 (Typical 28)			25 (Typical 28)		25 (Typical 28)
Interband Isolation [dB]		25			30		30
Passive Intermodulation (PIM) 3rd order, 2x20W [dBc]		< -153			< -153		< -153
Maximum Effective Power Per Port [W]		250			250		250

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REMOTE ELECTRICAL TILT (RET) INFORMATION	
Type	Integrated, Non-Removable
Power Input	10 - 30V DC
Protocol	3GPP/AISG2.0
RET Interface	8-Pin DIN
RET Interface (Quantity)	2 (1 Male + 1 Female)

PRODUCT VARIANT	
Single RET Firmware Configuration	F6RHEU01-V1
Multi RET Firmware Configuration	F6RHEU01-V2

SHIPPING AND ORDER INFORMATION		
Packing Size: Length, Width, Depth [inch|mm]	114.2x23.6x11.8 | 2900x600x300	
Fixed Bracket: Shipping Weight [lbs|kg], P/N	90 | 41	F6RHEU01-Vx-P2
Tilt Bracket: Shipping Weight [lbs|kg], P/N	95 | 43	F6RHEU01-Vx-P3

ENVIRONMENTAL COMPLIANCE	
ETSI EN300019-1-1 for Storage	Class 1.2
ETSI EN300019-1-2 for Transportation	Class 2.3
ETSI EN300019-1-4 for Environmental Condi-	Class 4.1E
Cold Temperature Survival [°F|°C]	-40 | -40
Hot Temperature Survival [°F|°C]	140 | 60

Network planning files and datasheet in NGMN XML formats are available on request by email.

Kaelus follows the definitions and recommendations per NGMN P-Basta version 12.0 (www.ngmn.org) within parameters shown on this datasheet.

All specifications are subject to change without notice. Visit www.kaelus.com for the most current data sheets.

Revised: 23 February 2026