

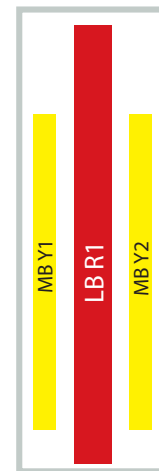
# P6BTBF01

6-Port, 65 Degree Ultra Wide Band Base Station Sector Antenna

## Kaelus Next Generation Base Station Antennas

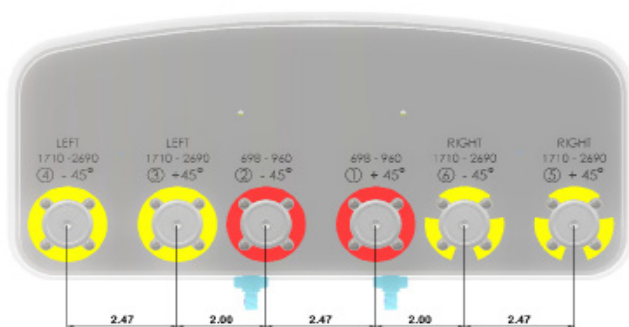
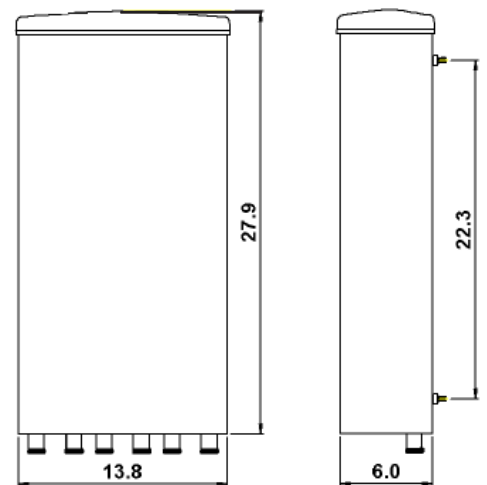
- Innovative Ultra Wide Band Slotted Disc Antenna Technology.
- Supports MIMO: 2x2 on Low Band and 4x4 on High Band.
- Suitable for Stadium and Street Cell Applications.

GENERAL	LB R1	MB Y1	MB Y2
Frequency Range	694-960	1695-2690	1695-2690
Gain Over All Tilts	12.2	14.7	14.7
Polarization	X	X	X
Azimuth Beamwidth [°]	65	65	65
Electrical Downtilt [°]	8	4	4
Ports Per Band	2	2	2



## Specifications and Layouts

MECHANICAL SPECIFICATIONS	
Antenna Dimensions: Length, Width, Depth [in]	27.9 x 13.8 x 6.0
Net Weight (Antenna) [lb]	17.6
Connector Type	7/16 DIN Female (Long Neck)
Connector Quantity	6
Connector Position	Bottom
Windload, Calculation [mph]	93.2
Windload, Maximum [lbf]	74.2
Windload, Frontal [lbf]	59.6
Windload, Lateral [lbf]	11.3
Survival Wind Speed [mph]	150
Radome Material	GRP
Radome Color [RAL]	7035 (Light Gray)
Product Environmental Compliance	RoHS
Mechanical Distance Between Mounting Points - Antenna [in]	22.3
Lightning Protection	DC Ground



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ELECTRICAL SPECIFICATIONS	LB R1			MB Y1/Y2				
Frequency Range [MHz]	698-746	746-806	806-894	1695-1780	1850-1995	2095-2200	2300-2400	2496-2690
Gain, Average [dBi]	12.0	12.1	12.3	14.0	14.5	15.0	15.3	15.5
Gain, Over All Tilts [dBi]	12.0 ±0.5	12.2 ±0.5	12.5 ±0.5	14.0 ±0.5	14.5 ±0.5	15.0 ±0.5	15.3 ±0.5	15.5 ±0.5
Azimuth Beamwidth [°]	72 ±3.0	68.5 ±3.0	65.0 ±3.0	62.5 ±5.0	68.0 ±4.0	65.0 ±3.0	63.0 ±3.0	60.0 ±5.0
Elevation Beamwidth [°]	35.7 ±1.5	33.5 ±3.0	31.5 ±3.0	14.3 ±0.5	13.0 ±0.5	11.3 ±0.5	10.4 ±0.5	9.7 ±0.5
Electrical Downtilt [°]	8			2x 4				
Elevation Downtilt Deviation [°]	1.5	1.5	1.5	0.6	0.7	0.7	0.5	0.8
Front-to-Back Ratio, Total Power, ±30° [dB]	22	22	22	25	25	25	26	25
Cross Polar Discrimination Over Sector [dB]	12.5	11.5	10	10	10	13	10	10
Cross Polar Discrimination Over 3dB Az. BW [dB]	18.5	17.5	16.5	14	13	16	15	16
First Upper Side Lobe Suppression [dB]	19	20	19	17	16	15	17	16
Upper Side Lobe Suppression [dB]	19	19	18	17	17	16	15	16
Polarization [°]	±45			±45				
Impedance [Ω]	50			50				
VSWR	< 1.5:1			< 1.5:1				
Return Loss [dB]	< -14.0			< -14.0				
Cross Polar Isolation [dB]	30			30				
Interband Isolation [dB]	35			35				
Passive Intermodulation [dBc]	< -153			< -153				
Maximum Effective Power Per Port [W]	350			350				

SHIPPING AND ORDER INFORMATION	
Packing Size: Length, Width, Depth [in]	39.6 x 19.7 x 11.8
No Bracket: Shipping Weight [lb], P/N	20.1 P6BTBF01-Vx-P1
Fixed Bracket: Shipping Weight [lb], P/N	29.8 P6BTBF01-Vx-P2
Tilt Bracket: Shipping Weight [lb], P/N	33.1 P6BTBF01-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 Conditions	Class 4.1E
Cold Temperature Survival [°F]	-40
Hot Temperature Survival [°F]	140

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 10.0 ([www.ngmn.org](http://www.ngmn.org)) within parameters shown on this datasheet.

All specifications are subject to change without notice. Visit [www.kaelus.com](http://www.kaelus.com) for the most current data sheets.

