

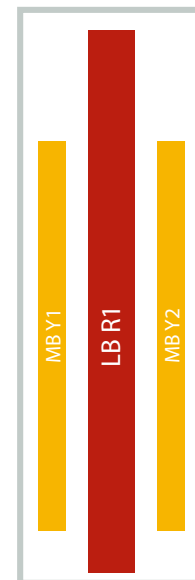
# P6BTBF01

6-Port, 65 Degree Base Station Sector Antenna

## Kaelus Next Generation Base Station Antennas

- Innovative slotted disc antenna technology
- Supports MIMO: 2x2 on Low Band and 4x4 on Mid Band
- Suitable for stadium and street cell applications

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



## Specifications and Layouts

MECHANICAL SPECIFICATIONS	
Antenna Dimensions: Length, Width, Depth [inch mm]	27.9x13.8x6.0   709x351x152
Net Weight (Antenna) [lbs kg]	17.6   7.0
Connector Type [V1 V2]	7/16   4.3-10 female
Connector Quantity	6
Connector Position	Bottom
Windload, Calculation* [mph km/h]	93.2   150
Windload, Frontal [lbf N]	59.6   265.1
Windload, Lateral [lbf N]	11.3   50.3
Survival Wind Speed [mph km/h]	150   241
Radome Material	GRP
Radome Color [RAL]	7035 (Light Gray)
Product Environmental Compliance	RoHS
Mech Distance Between Mounting Points - Antenna [inch mm]	22.3   566
Lightning Protection	DC Ground

\* According to EN 1991-1-4:2005+A 1:2010



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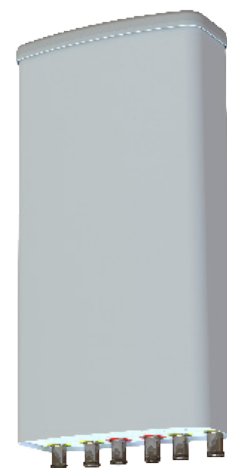
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ELECTRICAL SPECIFICATIONS	LB R1				MB Y1/Y2				
Frequency Range [MHz]	698-746	746-806	806-894	880-960	1695-1780	1850-1995	2095-2200	2300-2400	2496-2690
Gain, Average [dBi]	12.0	12.1	12.3	12.5	14.0	14.5	15.0	15.3	15.5
Gain, Over All Tilts [dBi]	12.0 ±0.5	12.2 ±0.5	12.5 ±0.5	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	62.0 ±4	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	28.3 ±2.0	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	1.2	0.6	0.7	0.7	0.5	0.8
Front-to-Back Ratio, Total Power, ±30° [dB]	22	22	22	22	25	25	25	26	25
Cross Polar Discrimination Over Sector	12.5	11.5	10	10	10	10	13	10	10
Cross Polar Discrimination Over 3dB Az.	18.5	17.5	16.5	15	14	13	16	15	16
First Upper Side Lobe Suppression [dB]	19	20	19	18	17	16	15	17	16
Upper Side Lobe Suppression [dB]	19	19	18	17	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 (PIM) 3rd order, 2x20W [dBc]	< -153				< -153				
Maximum Effective Power Per Port [W]	350				350				

PRODUCT VARIANT	
7/16 (DIN, long neck) connectors Female	P6BTBF01-V1
4.3-10 connectors Female	P6BTBF01-V2

SHIPPING VARIANT		
Packing Size: Length, Width, Depth [inch mm]	39.6x19.7x11.8   1006x500x300	
No Bracket: Shipping Weight [lbs kg], P/N	20.1   9.1	P6BTBF01-Vx-P1
Fixed Bracket: Shipping Weight [lbs kg], P/N	29.8   13.6	P6BTBF01-Vx-P2
Tilt Bracket: Shipping Weight [lbs kg], P/N	33.1   15.0	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 °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 11.1 ([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.



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