

# P6BDBF01

4-Port, 65 Degree Base Station Sector Antenna

## Kaelus Next Generation Base Station Antennas

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

GENERAL	MB Y1/Y2
Frequency Range [MHz]	1695-2690
Gain Over All Tilts [dBi]	14.7
Polarization	X
Azimuth Beamwidth [°]	65
Electrical Downtilt [°]	4
Ports	4



## Specifications and Layouts

MECHANICAL SPECIFICATIONS	
Antenna Dimensions: Length, Width, Depth [inch mm]	27.9x13.8x6.1   708x350x154
Net Weight (Antenna) [lbs kg]	17.6   8.0
Connector Type [V1 V2]	7/16   4.3-10
Connector Quantity	4
Connector Position	Bottom
Windload, Calculation* [mph km/h]	93.2   150
Windload, Frontal [lbf N]	59.6   265
Windload, Lateral [lbf N]	11.2   50
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   567
Lightning Protection	DC Ground

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

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ELECTRICAL SPECIFICATIONS	MB Y1 / MB Y2			
Frequency Range [MHz]	1710-1880	1920-2170	2300-2500	2500-2690
Gain, Average [dBi]	14.3	15.0	15.4	15.5
Gain, Over All Tilts [dBi]	14.3 ±0.5	15.0 ±0.5	15.3 ±0.5	15.5 ±0.5
Azimuth Beamwidth [°]	65.0 ±6.0	67.0 ±5.0	62.0 ±4.0	60.0 ±5.0
Elevation Beamwidth [°]	14.0 ±1.2	12.2 ±1.5	10.2 ±0.7	9.7 ±0.5
Electrical Downtilt [°]	2x 4			
Elevation Downtilt Deviation [°]	0.7	0.7	0.5	0.8
Front-to-Back Ratio, Total Power, ±30° [dB]	25	25	25	25
Cross Polar Discrimination Over Sector [dB]	10	10	10	10
Cross Polar Discrimination Over 3dB Az. BW [dB]	13	13	15	16
First Upper Side Lobe Suppression [dB]	17	16	17	16
Upper Side Lobe Suppression [dB]	17	15	15	16
Polarization [°]	±45			
Impedance [Ω]	50			
VSWR	< 1.5:1			
Return Loss [dB]	< -14.0			
Cross Polar Isolation [dB]	30			
Interband Isolation [dB]	35			
Passive Intermodulation (PIM) 3rd order, 2x20W [dBc]	< -153			
Maximum Effective Power Per Port [W]	350			

PRODUCT VARIANT	
7/16 (DIN, long neck) connectors Female	P6BDBF01-V1
4.3-10 connectors Female	P6BDBF01-V2

SHIPPING VARIANT	
Packing Size: Length, Width, Depth [inch mm]	39.6x19.7x11.8   1006x500x300
No Bracket: Shipping Weight [lbs kg], P/N	26.5   12   P6BDBF01-Vx-P1
Fixed Bracket: Shipping Weight [lbs kg], P/N	29.8   13.5   P6BDBF01-Vx-P2
Tilt Bracket: Shipping Weight [lbs kg], P/N	33.1   15.0   P6BDBF01-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.

