

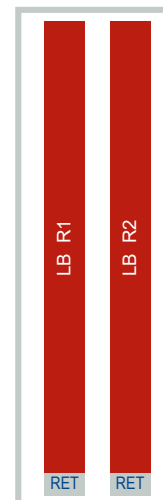
# P4BDLU01

4-Port, 40 Degree Base Station Sector Antenna

## Kaelus Next Generation Base Station Antennas

- Innovative Slotted Disc Antenna Technology
- High Gain Over An Extended Tilt Range
- Fully Integrated Remote Electrical Tilt, AISG Compatible
- Supports MIMO: 4x4
- Electrical specifications as per NGMN P-Basta version 12.0

GENERAL (BASTA)	LB R1	LB R2
Frequency Range	694-960	694-960
Gain Over All Tilts [dBi]	19.2	19.2
Polarization	X	X
Azimuth Beamwidth [°]	40	40
Electrical Downtilt Range [°]	0-10	0-10



## Specifications and Layouts

MECHANICAL SPECIFICATIONS	
Antenna Dimensions: Length, Width, Depth [inch mm]	94.1x38.0x5.6   2389.2x964x143
Net Weight (Antenna) [lbs kg]	128.1   58.1
Connector Type	4.3-10 Female
Connector Quantity	4
Connector Position	Bottom
Windload, Calculation* [mph km/h]	93.2   150
Windload, Frontal [lbf N]	630.0   2802
Windload, Lateral [lbf N]	42.2   187.7
Survival Wind Speed [mph km/h]	124.3   200
Radome Material	F/GRP
Radome Colour [RAL]	7035 (Light Gray)
Product Environmental Compliance	RoHS
Mounting bracket kit [lbs kg]	36.4   16.5
Mounting pole diameter [inch mm]	2.0 - 4.5   50 - 115
Mech. distance between mounting points - Antenna [inch mm]	91.3   2320
Lightning Protection	Yes - DC Ground

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)



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4-Port, 40 Degree Base Station Sector Antenna

ELECTRICAL SPECIFICATIONS (BASTA)		LB R1/R2		
Frequency Range [MHz]		694-788	791-862	880-960
Gain, Average [dBi]	Min Tilt	18.6	19.2	19.9
	Mid Tilt	18.8	19.4	20.1
	Max Tilt	18.6	19.2	19.9
Gain, Over All Tilts [dBi]		18.7±0.5	19.3±0.5	20.0±0.5
Azimuth Beamwidth [°]		44.0 ±5.0	40.0 ±5.0	35.0 ±5.0
Elevation Beamwidth [°]		8.2 ±0.5	7.7 ±0.5	6.8 ±0.5
Electrical Downtilt [°]		0-10		
Elevation Downtilt Deviation [°]		0.5	0.5	0.5
Front-to-Back Ratio, Total Power, ±30° [dB]		25	25	25
Cross Polar Discrimination Over Sector [dB]		10	10	10
First Upper Side Lobe Suppression [dB]		17	17	17
Upper Side Lobe Suppression [dB]		15	15	15
Horizontal Side Lobe Suppression [dB]		20	20	17
Polarization [°]		±45		
Impedance [Ω]		50		
VSWR		< 1.5:1		
Return Loss [dB]		< -14.0		
Cross Polar Isolation [dB]		30		
Interband Isolation [dB]		28		
Passive Intermodulation (PIM) 3rd order, 2x20W [dBc]		< -153		
Maximum Effective Power Per Port [W]		450		



SHIPPING AND ORDER INFORMATION	
Product number	P4BDLU01-V1-P2
Packing Size: Length, Width, Depth [inch mm]	106.3x43.3x11.8   2700x1100x300
Shipping Weight [lbs kg]	179.7   81.5

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 12.0 ([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.

