

MPMDF01

4-Port, Peanut-shaped Pattern, Small Cell Canister Antenna

Kaelus Next Generation Base Station Antennas

- Innovative slotted disc antenna technology
- Peanut-shaped pattern for street/highway coverage

GENERAL	MB Y1/Y2
Frequency Range [MHz]	1695-2690
Gain Over All Tilts [dBi]	11.0
Polarization	X
Azimuth Beamwidth [°]	Peanut
Electrical Downtilt [°]	2
Ports	4



Specifications and Layouts

MECHANICAL SPECIFICATIONS	
Antenna Dimensions: Length, Diameter [inch mm]	25.2x10.0 640x254
Net Weight (Antenna) [lbs kg]	17.6 8.0
Connector Type	4.3-10 female
Connector Quantity	4
Connector Position	Bottom
Windload, Calculation* [mph km/h]	93.2 150
Windload, Maximum [lbf N]	19.1 85
Survival Wind Speed [mph km/h]	124.3 200
Radome Material	ASA
Radome Color [RAL]	7035 (light gray)
Product Environmental Compliance	RoHS
Lightning Protection	DC Ground

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



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ELECTRICAL SPECIFICATIONS	MB Y1/Y2				
Frequency Range [MHz]	1695-1780	1850-1995	2095-2200	2300-2400	2496-2690
Gain, average [dBi]	9.5	10.0	10.9	11.5	12.2
Azimuth Beamwidth [°]	2x70±5.0	2x68±5.0	2x65±5.0	2x65±5.0	2x63±5.0
Elevation Beamwidth [°]	12.5±4.0				
Electrical Downtilt [°]	2	2	2	2	2
Elevation Downtilt Deviation [°]	1	1	1	1	1
Cross Polar Discrimination Over Sector [dB]	12	15	15	12	12
First Upper Side Lobe Suppression [dB]	17	17	17	17	17
Upper Side Lobe Suppression [dB]	15	15	15	15	15
Polarization [°]	±45				
Impedance [Ω]	50				
VSWR	< 1.5:1				
Return Loss [dB]	< -14.0				
Cross Polar Isolation [dB]	25				
Interband Isolation [dB]	25				
Passive Intermodulation (PIM) 3rd order, 2x20W [dBc]	< -153				
Maximum Effective Power Power Per Port [W]	100				

SHIPPING AND ORDER INFORMATION		
Packing Size: Length, Width, Depth [inch mm]	34x18x18 864x458x458	
Shipping Weight [lbs kg]	26.5 12.0	MPMDBF01-V1-P

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

ADDITIONAL ACCESSORIES (AVAILABLE TO ORDER)	
Side Pole/Wall Mount Kit (incl. cover)	KIT-000039-P
Top Pole Mount Kit [2.4-6.3 inch 60-160mm] (incl. cover)	KIT-000040-P
Top Pole Mount Kit [5.5-8.7 inch 140-220mm] (incl. cover)	KIT-000041-P



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) within parameters shown on this datasheet.

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

