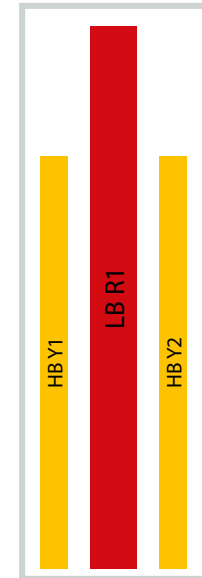


Filtronic Next Generation Base Station Antennas

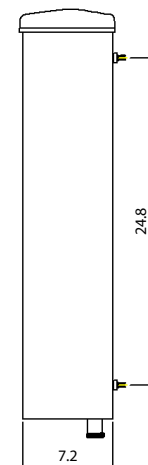
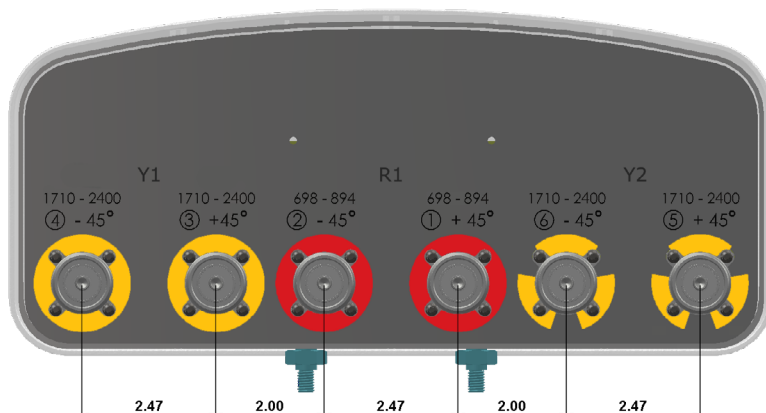
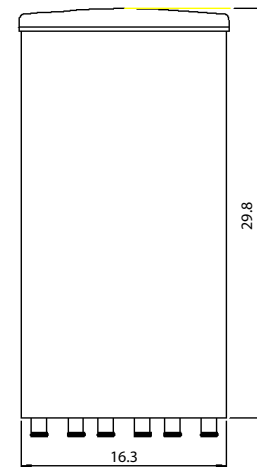
- Innovative New Dual-band Element Technology.
- High Gain per Length.
- Supports MIMO: 2x2 on Low Band and 4x4 on High Band.

	LB R1	HB Y1	HB Y2
Frequency Range	698-894	1710-2400	1710-2400
Gain Over All Tilts [dBi]	14.0	16.0	16.0
Polarization	X	X	X
Azimuth Beamwidth [°]	45	45	45
Electrical Downtilt [°]	8	4	4
Ports Per Band	2	2	2



Specifications and Layouts

MECHANICAL SPECIFICATIONS	
Antenna Dimensions: Length, Width, Depth [in]	29.8 x 16.3 x 7.2
Net Weight (Antenna) [lb]	26.4
Connector Type	7/16 DIN Female (Long Neck)
Connector Quantity	6
Connector Position	Bottom
Windload, Calculation [mph]	93.2
Windload, Maximum [lbf]	94.4
Windload, Frontal [lbf]	75.3
Windload, Lateral [lbf]	13.5
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]	24.8
Lightning Protection	DC ground



ELECTRICAL SPECIFICATIONS	LB R1			HB Y1/Y2			
	698-746	746-806	806-894	1710-1780	1850-1995	2095-2200	2300-2400
Frequency Range [MHz]	698-746	746-806	806-894	1710-1780	1850-1995	2095-2200	2300-2400
Gain, Average [dBi] Min Tilt	13.7	14.0	14.4	15.3	15.8	16.2	17.0
Gain, Over All Tilts [dBi]	13.7 ±0.5	14.0 ±0.5	14.4 ±0.5	15.3 ±0.5	15.8 ±0.5	16.2 ±0.5	17.0 ±0.5
Azimuth Beamwidth [°]	47.0 ±3.0	43.0 ±3.0	42.0 ±3.0	45.0 ±3.0	42.0 ±3.0	40.0 ±3.0	37.0 ±3.0
Elevation Beamwidth [°]	35.0 ±3.0	32.0 ±3.0	30.0 ±3.0	13.8 ±0.8	13.0 ±0.8	12.4 ±0.8	10.5 ±0.5
Electrical Downtilt [°]	8			2x 4			
Elevation Downtilt Deviation [°]	1.5	1.5	1.5	0.8	0.8	0.8	0.8
Front-to-Back Ratio, Total Power, ±30° [dB]	22	25	25	25	25	25	25
Cross Polar Discrimination Over 3dB Az. BW [dB]	17	17	17	15	15	15	15
First Upper Side Lobe Suppression [dB]	16	16	16	16	16	16	16
Upper Side Lobe Suppression [dB]	15	15	15	12	12	12	12
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]	27			30			
Interband Isolation [dB]	45			45			
Passive Intermodulation [dBc]	< -153			< -153			
Maximum Effective Power Per Port [W]	300			250			

SHIPPING VARIANT	
Packing Size: Length, Width, Depth [in]	39.6 x 20.9 x 11.8
Fixed Bracket: Shipping Weight [lb], P/N	37.7 P4T2BF01-V1-P
Tilt Bracket: Shipping Weight [lb], P/N	40.7 P4T2BF01-V2-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]	-40
Hot Temperature Survival [°F]	140

Network planning files and datasheet in NGMN XML formats are available on request by email to fwlsales@filtronic.com.

Filtronic follows the definitions and recommendations per NGMN P-Basta version 10.0 (www.ngmn.org) within parameters shown on this datasheet.

All specifications are subject to change without notice. Visit www.filtronic.com for the most current datasheets.

Contact Us

700 Marvel Rd | Salisbury | MD 21801 | USA

+1 410 202 8811

fwlsales@filtronic.com

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