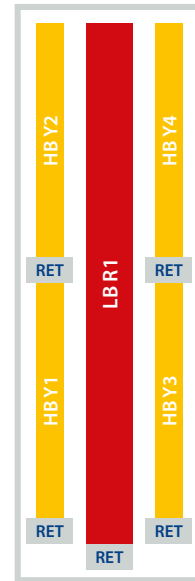


Filtronic Next Generation Base Station Antennas

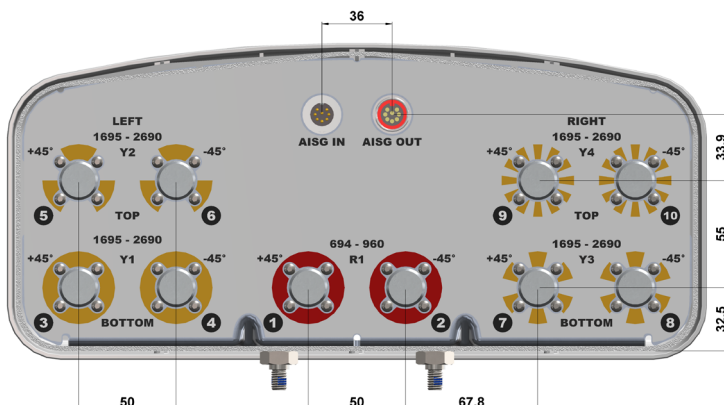
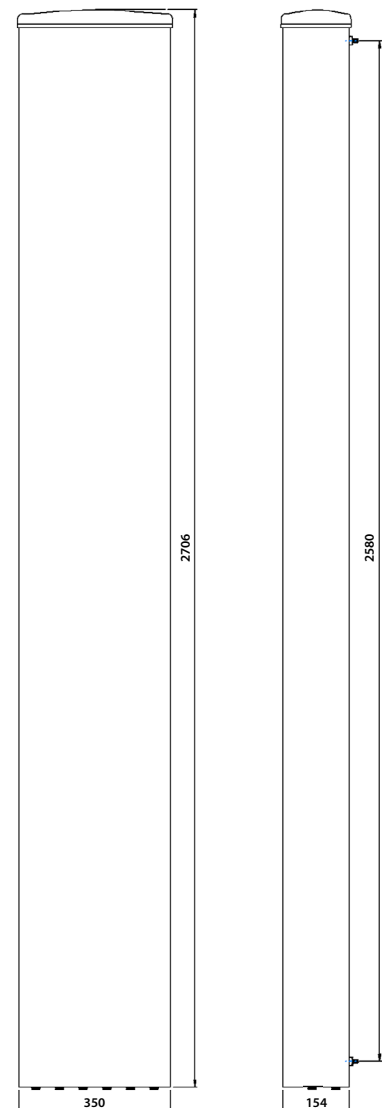
- Innovative Ultra Wide Band Slotted Disc Antenna Technology.
- High Gain Over An Extended Tilt Range.
- Fully Integrated Remote Electrical Tilt, AISG Compatible.
- Supports MIMO: 2x2 on Low Band and 4x4 on High Band.

	LB R1	HB Y1	HB Y2	HB Y3	HB Y4
Frequency Range	694-960	1695-2690	1695-2690	1695-2690	1695-2690
Gain Over All Tilts [dBi]	17.5	18.0	17.5	18.0	17.5
Polarization	X	X	X	X	X
Azimuth Beamwidth [°]	65	65	65	65	65
Electrical Downtilt Range [°]	2-12	2-12	2-12	2-12	2-12
Ports Per Band	2	2	2	2	2



Specifications and Layouts

MECHANICAL SPECIFICATIONS	
Antenna Dimensions: Length, Width, Depth [mm]	2706 x 350 x 154
Net Weight (Antenna) [kg]	35
Connector Type	4.3-10 Female
Connector Quantity	10
Connector Position	Bottom
Windload, Calculation [km/h]	150
Windload, Maximum [N]	1541
Windload, Frontal [N]	1226
Windload, Lateral [N]	194
Survival Wind Speed [km/h]	200
Radome Material	GRP
Radome Colour [RAL]	7035 (Light Gray)
Product Environmental Compliance	RoHS
Mechanical Distance Between Mounting Points - Antenna [mm]	2580
Lightning Protection	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)



ELECTRICAL SPECIFICATIONS	LB R1			HB Y1/Y3					HB Y2/Y4					
Frequency Range [MHz]	698-790	790-862	880-960	1710-1880	1900-2025	2110-2170	2300-2500	2500-2690	1710-1880	1900-2025	2110-2170	2300-2500	2500-2690	
Gain, Average [dBi]	Min Tilt	17.0	17.6	17.9	17.0	17.3	17.8	17.9	18.1	16.5	16.8	17.3	17.4	17.6
	Mid Tilt	17.0	17.6	18.1	17.1	17.4	17.9	18.1	18.2	16.6	16.9	17.4	17.6	17.7
	Max Tilt	17.0	17.6	17.8	16.9	17.2	17.7	17.8	17.7	16.4	16.7	17.2	17.3	17.2
Gain, Over All Tilts [dBi]	17.0±0.5	17.6±0.5	18.0±0.5	17.0±0.5	17.3±0.5	17.8±0.5	18.0±0.5	18.1±0.5	16.5±0.5	16.8±0.5	17.3±0.5	17.5±0.5	17.6±0.5	
Azimuth Beamwidth [°]	69.0±3.5	66.0±3.5	63.0±2.0	71.0±3.0	69.0±3.0	66.0±3.0	61.5±4.0	59.0±3.0	71.0±3.0	69.0±3.0	66.0±3.0	61.5±4.0	59.0±3.0	
Elevation Beamwidth [°]	8.0±0.5	7.3±0.4	6.5±0.4	7.7±0.5	7.0±0.3	6.3±0.4	5.6±0.4	5.2±0.4	7.7±0.5	7.0±0.3	6.3±0.4	5.6±0.4	5.2±0.4	
Electrical Downtilt [°]	2-12			2x 2-12					2x 2-12					
Elevation Downtilt Deviation [°]	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	
Front-to-Back Ratio, Total Power, ±30° [dB]	23	24	22	25	25	26	27	27	25	25	26	27	27	
Cross Polar Discrimination Over Sector [dB]	10	11	10	8	10	12	8	8	8	10	12	8	8	
First Upper Side Lobe Suppression [dB]	17	17	17	17	17	17	17	17	17	17	17	17	17	
Upper Side Lobe Suppression [dB]	15	15	15	15	15	15	15	10	15	15	15	15	10	
Polarization [°]	±45			±45					±45					
Impedance [Ω]	50			50					50					
VSWR	< 1.5:1			< 1.5:1					< 1.5:1					
Return Loss [dB]	< -14.0			< -14.0					< -14.0					
Cross Polar Isolation [dB]	30			30					30					
Interband Isolation [dB]	37			37					37					
Passive Intermodulation [dBc]	< -153			< -153					< -153					
Maximum Effective Power Per Port [W]	350			250					250					

PRODUCT VARIANT

Single RET Firmware Configuration	P6BPEU01-V1-Px
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SHIPPING VARIANT

Packing Size: Length, Width, Depth [mm]	2950 x 500 x 300	
No Bracket: Shipping Weight [kg], P/N	41	P6BPEU01-V1-P1
Fixed Bracket: Shipping Weight [kg], P/N	44	P6BPEU01-V1-P2
Tilt Bracket: Shipping Weight [kg], P/N	46	P6BPEU01-V1-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 [°C]	-40
Hot Temperature Survival [°C]	60

Network planning files, RET configurations files and datasheet in NGMN XML formats are available on request by email.

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.

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