

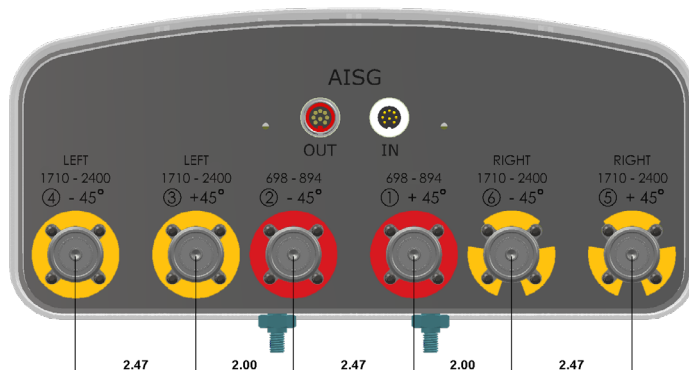
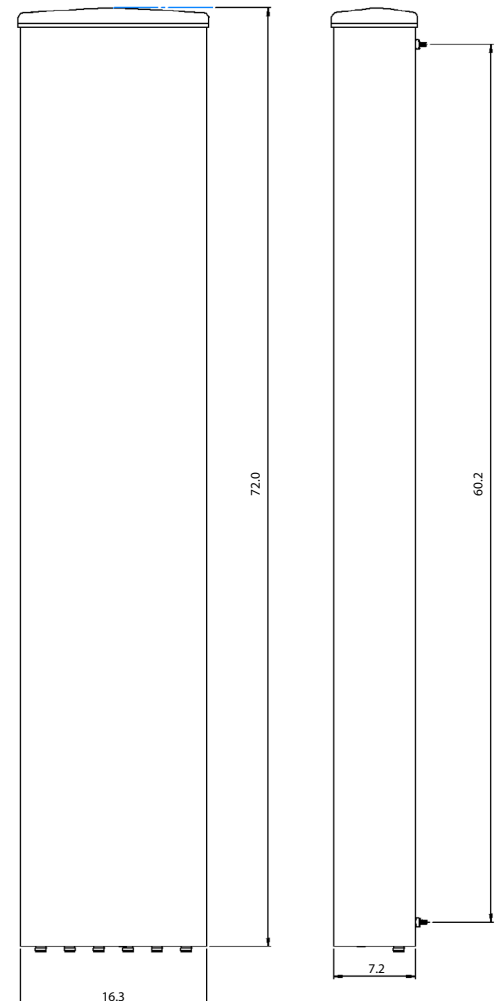
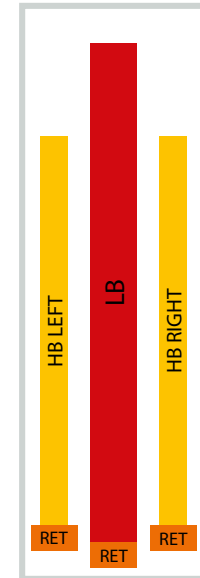
Filtronic Next Generation Base Station Antennas

- Innovative Dual band 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	HB LEFT	HB RIGHT
Frequency Range	694-894	1710-2400	1710-2400
Gain Over All Tilts [dBi]	17.0	18.5	18.5
Polarization	X	X	X
Azimuth Beamwidth [°]	45	45	45
Electrical Downtilt [°]	0-12	0-8	0-8
Ports Per Band	2	2	2

Specifications and Layouts

MECHANICAL SPECIFICATIONS	
Antenna Dimensions: Length, Width, Depth [in]	72.0 x 16.3 x 7.2
Net Weight (Antenna) [lb]	50.6
Connector Type	4.3-10 Female
Connector Quantity	6
Connector Position	Bottom
Wind Load, Calculation [mph]	93.2
Wind Load, Maximum [lbf]	246.2
Wind Load, Frontal [lbf]	199.0
Wind Load, Lateral [lbf]	35.3
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]	60.2
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			HB (LEFT/RIGHT)			
Frequency Range [MHz]		698-793	792-862	806-894	1710-1780	1850-1995	2095-2200	2300-2400
Gain, Average [dBi]	Min Tilt	16.6	16.9	17.3	17.6	18.1	18.5	19.2
	Mid Tilt	16.8	17.1	17.5	17.8	18.3	18.7	19.4
	Max Tilt	16.6	16.9	17.3	17.6	18.1	18.5	19.0
Gain, Over All Tilts [dBi]		16.7 ±0.5	17.0 ±0.5	17.4 ±0.5	17.7 ±0.5	18.2 ±0.5	18.6 ±0.5	19.3 ±0.5
Azimuth Beamwidth [°]		47.0 ±3.0	43.0 ±3.0	42.0 ±2.0	45.0 ±3.0	42.0 ±3.0	40.0 ±3.0	37.0 ±2.0
Elevation Beamwidth [°]		13.6 ±2.0	12.5 ±2.0	11.7 ±2.0	6.6 ±0.6	6.2 ±0.6	5.9 ±0.6	5.0 ±0.4
Electrical Downtilt [°]		0-12			2x 0-8			
Elevation Downtilt Deviation [°]		0.6	0.5	0.5	0.4	0.4	0.3	0.3
Front-to-Back Ratio, Total Power, ±30° [dB]		22	25	25	25	25	25	25
Cross Polar Discrimination Over Sector [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]		35			35			
Passive Intermodulation [dBc]		< -153			< -153			
Maximum Effective Power Per Port [W]		250			200			

PRODUCT VARIANT

Single RET Firmware Configuration	P4PTMU01-V1-Px
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SHIPPING VARIANT

Packing Size: Length, Width, Depth [in]	89.8 x 19.7 x 11.8	
No Bracket: Shipping Weight [lb], P/N	59.6	P4PTMU01-V1-P1
Fixed Bracket: Shipping Weight [lb], P/N	63.9	P4PTMU01-V1-P2
Tilt Bracket: Shipping Weight [lb], P/N	68.3	P4PTMU01-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 [°F]	-40
Hot Temperature Survival [°F]	140

Network planning files, RET configurations 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.

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