Product Summary

ANN-MB series



Multi-band, high precision GNSS antennas

Highlights

- Multi-band (L1, L2/E5b) active GNSS antennas with excellent price-performance ratio
- Supports GPS, GLONASS, Galileo, and BeiDou
- Fast and easy antenna solution for high precision applications
- · Versatile mounting and connector options



Product description

The u-blox ANN-MB multi-band (L1, L2/E5b) active GNSS antennas are designed to reduce time to market for the next generation of high precision GNSS applications, which require highly accurate location abilities. The compact design, excellent price-performance ratio, and versatile mounting and connector choices provide customers with fast, easy, and reliable multi-band antenna solutions. The ANN-MB antenna is a perfect match to the latest u-blox F9 platform including the ZED-F9P module, thus providing customers with the valuable antenna solution they need to minimize design-in efforts.

Mechanical data

Weight	175 g (Typ. including cable)	
Size	60.0 x 82.0 x 22.5 mm	
Cable	5 m RG174 standard	
Connectors (choice)	SMA, SMB, MCX	
Mounting	Mounting Magnetic base, fixed installation option	
Housing color	Black	

Patch antenna characteristics

	L1 Band	L2/E5b Band
Frequency	1559 - 1606 MHz	1197 - 1249 MHz
VSWR	Max. 2.0	Max. 2.0
Impedance	50 Ω	50 Ω
Peak gain (on Ø15 cm ground plane)	Typ. 3.5 dBic	Typ. 0 - 2.0 dBic
Polarization	RHCP	RHCP

Environmental data

Operating temperature	-40 ° C to +85 ° C	
Storage temperature	-40 ° C to +85 ° C	
Water proof	IP 67	

Amplifier characteristics

	L1 Band		L2/E5b Band
Frequency	1559 - 1606	MHz	1197 - 1249 MHz
Gain without cable (@ 5 V)	28 ± 3.0 dB		$28\pm3.0~\text{dB}$
Noise figure (@ 5 V)	Max. 2.8 dB		Max. 3.2 dB
Output VWSR	Max. 2.0		Max. 2.0
DC voltage		3.0 – 5.0 V	
DC current (@ 5 V)		Typ. 15.0 n	nA

Product variants

ANN-MB-00	Multi-band active GNSS antenna with 5 m cable and SMA connector
ANN-MB-01	Multi-band active GNSS antenna with 5 m cable and SMB connector
ANN-MB-02	Multi-band active GNSS antenna with 5 m cable and MCX connector

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Further information

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