

ANN-MS

High performance active antenna

Product description

The high performance ANN-MS active GPS antenna with integrated low-noise amplifier (LNA) is the perfect match to the u-blox GPS receivers where high sensitivity and optimum sky coverage are essential.



48 x 40 x 13 mm

Benefits

- Easy to use
- Compact size
- High performance
- Fast and easy integration
- No antenna know-how necessary





Features

- Built-in low noise amplifier with 27 dB gain and 1.8 dB noise figure
- 5 m coaxial cable
- Magnetic base suitable for mounting on car roof
- Industrial temperature range: -40°C to $+85^{\circ}\text{C}$
- Wide range of supply voltage: 2.7 V to 6 V
- Wide range of supply voltage: 2.7 V to 6 V

Overview

ANN-MS offers the high performance to exploit the full capabilities of all u-blox GPS receivers. ANN can be operated at a supply voltage of 3V – 5V.

Available with Different RF Connectors

			
ANN-MS-0: SMA	ANN-MS-1: SMB	ANN-MS-2: MCX	ANN-MS-3: FAKRA

Patch antenna characteristics

Frequency	1575 ± 3 MHz
VSWR	Max. 2
Bandwidth	Min. 10 MHz
Impedance	50 Ω
Peak gain	Min. 4 dBic (over 7 x 7 cm ground plane)
Gain coverage	≥ -4 dBic at -90° C ≤ θ ≤ +90° C (over 75% volume)
Power handling	1 Watt
Polarization	RHCP (Right-handed circular polarization)

Amplifier characteristics

Gain without cable	Typ. 27 dB
Noise figure	Max. 1.8 dB
Output VWSR	Max. 2.0
DC Voltage	2.7 V – 6 V
DC Current	typ 8.5 mA, ± 4.5 mA

Environmental Data

Operating temperature	-40° C to 85° C
Storage temperature	-50° C to 85° C
Humidity	95% ~ 100% RH
Vibration	Sine sweep 1G (0-Peak), 10–150–10 Hz each axis

Ordering information

ANN-MS-0-005-0	All ANN active GPS antennas with 5m cable and SMA connector
ANN-MS-1-005-0	ANN Active GPS Antenna 5m cable, SMB connector
ANN-MS-2-005-0	ANN Active GPS Antenna 5m cable, MCX connector
ANN-MS-3-005-0	ANN Active GPS Antenna 5m cable, FAKRA connector

Legal Notice

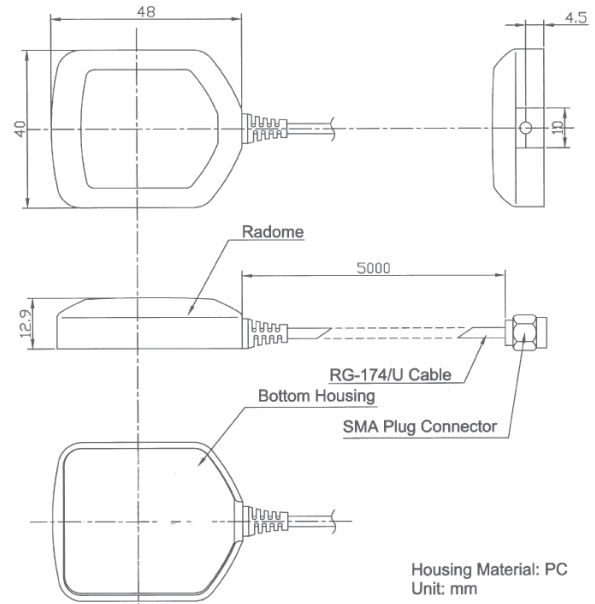
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Mechanical Data

Weight	42 g (without cable)
Size	48 x 40 x 13 mm
Cable	5 m RG174 standard
Connectors (choice)	SMA, SMB, MCX, FAKRA
Mounting	Magnetic base
Housing color	Black



CE Approval

Applicable Standards	ETSI EN 301 489-19 V1.2.1:2002
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Electromagnetic compatibility and Radio spectrum Matters (ERM)

Part 19: Specific conditions for receive-only mobile earth stations (ROMES) operating in the 1,5 GHz band providing data communication

Contact us

HQ Switzerland
+41 44 722 7444
info@u-blox.com

EMEA
+41 44 722 7444
info@u-blox.com

Americas
+1 703 483 3180
info_us@u-blox.com

APAC – Singapore
+65 6734 3811
info_ap@u-blox.com

China
+86 10 68 133 545
info_cn@u-blox.com

Japan
+81 3 5775 3850
info_jp@u-blox.com

Korea
+82 02 542 0861
info_kr@u-blox.com

Taiwan
+886 2 2657 1090
info_tw@u-blox.com