

Waterproof Magnetic GPS Antennas

IP67 Compliant



U-Series

Features

- ✓ Waterproof in 1m of water for 30 minutes
- ✓ Low gain and high gain models
- ✓ Compact size with protective foam cushion
- ✓ Wide operating voltage and low current consumption models

Navigating or tracking in a downpour or a dust storm? Not a situation where you want your GPS antenna to stop working due to sealing. The new U-Series offers a new level of protection: IP67 waterproof and dustproof compliance.

The U-Series will operate even after 30 minutes of immersion in a 1m tank of water. Screws are made of stainless steel to prevent corrosion. A foam cushion is provided to prevent scratching.

With a variety of gains, operating voltages, and current consumption available, there is a U-Series right for you.

The U-Series offers high GPS performance in a compact 1.93"L x 1.44"W x 0.62"H size.

Cable length and connector configurations are customized to meet your requirements.

RoHS Compliant

Amplifier Specifications:

Model	U812B	U820B	U827B	U827A	U335C	U535C
Amplifier Gain	12dB typ.	20dB typ.	27dB typ.	27dB typ.	35dB typ.	35dB typ.
Noise Figure	1.8dB typ.	1.8dB typ.	1.8dB typ.	1.4dB typ.	2.0dB typ.	2.0dB typ.
Output VSWR	2.0 max.	2.0 max.	2.0 max.	2.0 max.	2.0 max.	2.0 max.
DC Voltage	2.7V to 6.0V	2.7V to 6.0V	2.7V to 6.0V	3.0V to 5.5V	2.7V to 4.2V	4.0V to 6.0V
DC Current	4.5±2.5mA	3.5±2mA	8.5±4.5mA	22±5mA	22±5mA	22±5mA

Patch Antenna Specifications

Frequency	1575.42 ± 3 MHz
VSWR	1.5 max.
Bandwidth	20MHz min. at -10dB
Peak Gain	4dBic min. at 0° (7cm x 7cm ground plane)
Impedance	50Ω
Axial Ratio	3dB typ.
Power Handling	1 watt
Polarization	RHCP

Mechanical Specifications

Weight (without cable)	42 g max.
Size (LWH)	1.93" 1.44" x 0.62"
Connector	SMA, BNC, SMB, SMC, MCX, MMCX, TNC, MC Card, FAKRA, GT5
Cable Type and Length	5m RG174 std. RG316 and other lengths available.
Mounting	Magnetic

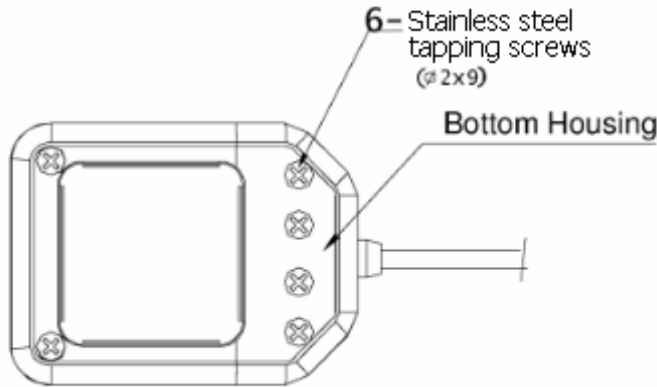
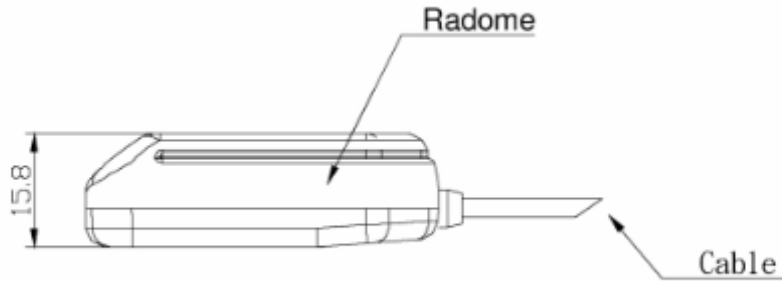
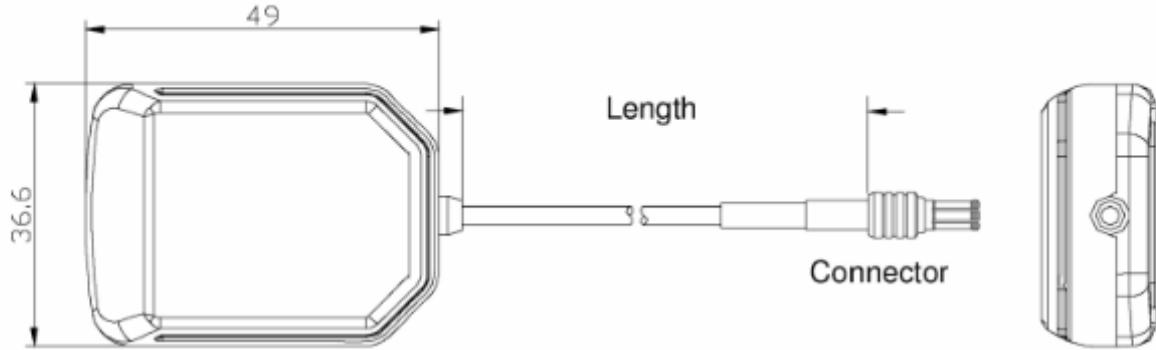
Environmental Specifications

Working Temperature	-40°C < T < +85°C
Operating Temperature	-50°C < T < +85°C
Degree of Protection (with housing)	IP67 (Dustproof and Waterproof)

Note: Specifications subject to change without notice.



MECHANICAL DRAWING



U Series
Housing Material: ASA
Unit: mm

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETER TOLERANCES:	
ANGLE	± 1°
1 PLACE DECIMALS	±0.2
2 PLACE DECIMALS	±0.15
3 PLACE DECIMALS	±0.05

