

Datasheet SA200G

Active Antenna



Description

- The SA-200 is the integration of the high performance GPS patch antenna and a state-of-the-art low noise amplifier into an extremely compact/fully waterproof enclosure.
- When connected to a GPS receiver with +5 V DC antenna power it provides excellent antenna signals and out-band filtering with rejection for this receiver
- Polycarbonate random enclosure (top & bottom base with rubber O-ring in between)

Applications

The antenna is used in maritime applications or on buildings. Cable lengths of up to 50 meters can be used without any signal degradation.

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Mechanical Data:

Ø in inch x H - 4,5" x 2.9"
Weight - 220gram (without cabel)
Standard Mounting - Flagpole mount 1)
cabin roof-mount with stainless steel
base & shaft
Optional Mounting - 2) Rail side mount
with stainless rod

Overall Performance

Center Frequency - 1575.42 +/- 1.023
MHz
Gain - 28 dB typical
Noise Figure - 1.5 max
Band With - 2 MHz min
Supply Voltage - 4.0 ~ 6.0 V DC
Current Consumption - 28 mA +/- 3 mA
VSWR - 2.0 max.
Output Impedance - 50 Ω

Cable & Connector:

Connector on antenna - TNC jack and othe
types optional
RF Cable - 10m RG58 A/U with TNC plug on
one end and BN on the other
Optional Cable - 15~50 m are available upon
request. Cable connectors are hermetically
molded plastics for waterproof and stain
relief.
Pulling Strength - 12kg for 5 sec.

Antenna element:

Center Frequency - 1575.42 +/-
1.023MHz
Polarization - R.H.C.P
Absolute Gainat Zentith - +5dBi typically
Gain at 10° Elevation - -1 dBi typically
Axial ratio - 3 dB max.
Output VSWR - 1.5:1 max
Output Impedance - 50 Ω

Low noise Amplifier:

Center Frequency - 1575.42 +/- 1.023
MHz
Gain - 28 dB typical
Noise Figure - 1.5 max
Band With - 2 MHz min
Supply Voltage - 4.0 ~ 6.0 V DC
Current Consumption - 28 mA +/- 3 mA
VSWR - 2.0 max.
Output Impedance - 50 Ω

Environmental Conditions:

Operating Temp. - -40°C ~ + 85°C
Storage Temp. - -30°C ~ + 85°C
Relative Humidity - 95% non-
condensing
Waterproof - 100% waterproof