



External GPS Antenna

GPS15

LOW-COST ANTENNA IS IDEAL IN RUGGED CONDITIONS

The TE low-cost GPS antenna is designed to receive GPS broadcast. The GPS magnet mount car antenna specifications are based on a one-meter ground plane. This high-volume, low-cost product meets automotive specifications for durability and quality.

TE is the leading supplier of vehicular & GPS antenna solutions to the public safety, land mobile radio, and asset tracking industries. Antennas offered range from VHF to 5 GHz, with various multiband offerings; form factors include whip style or low profile.

FEATURES

- Small footprint - very low profile
- IP67 rated
- RG-174, with multiple connectors options available
- Grommet over mold allows for better cable stability
- Rubber splint to route cable directly in edge-of-roof applications
- Label and liner can be modified to meet the needs of the customer
- Magnet mount with rubber feet to ensure no damage to vehicle surface

BENEFITS

- Low total-cost implementation
- Easy installation
- Small package size
- Meets enhanced environmental specifications
- General automotive aftermarket
- Fleet logistics, tracking, and diagnostics
- Theft protection
- Vehicle and asset recovery
- Navigation systems
- Infotainment systems
- On-board computing

EXTERNAL GPS

ANTENNA SPECIFICATION

Frequency Range	1574.42-1576.42 MHz
Peak Gain	4.0 dBic max @ Boresight
Polarization	RHCP
Impedance	50 Ω
Output VSWR (Min. performance)	$\leq 2:1$

LNA SPECIFICATION

Gain (Max)	29 dB
Noise Figure	≤ 1.5 dB
Supply Voltage	3.3 \pm 0.3V or 5.0 \pm 0.5V
Current	25 mA
Input P1dB	≥ -27 dBm
Output VSWR	$\leq 2:1$

MECHANICAL SPECIFICATION

Dimension	44 x 36 x 14mm
Radome Material	Black ASA+pC (Luran S 778T)
Connector	SMB
Cable Length	7010mm
Cable Type	Micro Coax Cable
Mounting Method	Magnetic

ENVIRONMENTAL SPECIFICATION

Operating Temperature	-40 C to +85 C
Humidity	Operation 95% RH at 65oC
Ingress Protection	IP67 Rated
Drop Test / Shock	50 g shocks 10x3 axis / 1 meter drop 6 axis
Vibration	10-1000 Hz vibration 1 hour 3 axis

ORDERING INFORMATION

Model #	Connector
GPS15MG-MMCX-M	MMCX
GPS15MG SMA	SMA
GPS15MG SMB	SMB
GPS15MG TN	TNC

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