



GPS Active Antenna

Model: MK-76E

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IPX7 Mini GPS Antenna with ESD Circuit Protection



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Overview:

MK-76E is the most compact GPS antenna available on the current market. Its state-of-the-art technology allows for miniature without. With good coverage almost all the way to the horizon, it performs excellently in foliage or urban canyon environment -- even in the presence of electromagnetic interference!

Featuring diminutive and rugged enclosure and unparalleled performance, MK-76E is compatible with almost every GPS receiver model on the markets and provides an excellent alternative for a vast range of GPS applications including AVL, Vehicle Navigation, Aviation, and Military.

Features:

- ESD circuit protection
- Diminutive & rugged construction allows for military and other applications demanding high degree of confidentiality.
- Ultra-high sensitivity.
- Module board available for embedded applications.
- Ideal for PDA, HPC, and other computing devices in GPS applications.
- IPX7 fully weatherproof.
- Excellent temperature stability



Applications:

- AVL / Car Navigation / Vehicle Tracking / Weather Balloon / Security Surveillance / Antenna for Handheld GPS / PDA / PC

Specification:

Physical Condition	
Dimension:	33.95mm (L) x 25.20mm (W) x 10.60mm (H)
Weight:	30 grams (excluding cable & connector)
Construction:	Polycarbonate radome on metal base
Color of Radome:	Standard in dark gray, other colors available upon request
Standard Mounting:	Magnet or screw mount
Antenna Element	
Center Frequency:	1575.42 MHz +/- 1.023 MHz
Polarization:	R.H.C.P. (Right Hand Circular Polarization)
Absolute Gain at Zenith:	+1 dBiC typically
Gain at 10o Elevation	-5 dBiC typically
Axial Ratio:	3.0 dB max.
Output Impedance	50 ohm
Output VSWR:	2 max.
LNA (Low noise Amplifier)	
Center Frequency:	1575.42 MHz +/- 1.023 MHz
Gain:	27dB @ 3V
Noise Figure:	1.5 dB typically
Band Width:	10 MHz min. @S11<=-10 dB
Supply Voltage:	2.5 ~ 5 V DC
Current Consumption:	3V : 10.6mA typically 5V : 21mA typically
Output Impedance:	50 ohm
Output VSWR:	2 max.
Total Specifications(Through LNA, Cable and Connector)	
Center Frequency:	1575.42 MHz
Gain:	27 dB typically
Noise Figure:	1.8 dB
Band Width:	5 MHz
Axial Ratio:	3 dB max.
VSWR:	2 dB typically
Output Impedance:	50 ohm

RF Cable:	10" RG178/U (standard), other length available
Pulling Strength:	6 Kg/5 sec. with molded plastics on connector end for strain relief
Connector Available:	BNC, TNC, FME (to be adapted), GT5, MCX (OSX), SMA, SMB or SMC in straight or right angle type
Optional Adapters:	FME~MCX, FME~BNC, FME~SMA, FME~SMB, FME~TNC
Environmental Conditions	
Operating Temperature:	-40°C ~ +85°C
Storage Temperature:	-40°C ~ +90°C
Relative Humidity:	95% non-condensing
Waterproof:	100% waterproof

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Mechanical Diagram:

