

## Active GPS-Antenna, MK-76



### Description

The MK-76 is an external GPS L1 Antenna with high gain and low power consumption, suitable for many GPS receivers. The MK-76 consists of a high-performance patch antenna connected to a preamplifier and housed in a low-profile, waterproof housing. The Current for the preamplifier comes from the receiver via the RF line and is should be 2.5V to 5.5V.

Due to its small size and robustness, the MK-76 is suitable for a wide range of applications

- Very compact & sensitive
- Robust construction
- Small, low-profile housing
- IP67 Weatherproof
- Low power consumption
- Screw & Magnetic Fastening
- Excellent temperature stability
- Low noise level

### Applications

- AVL
- Fleet Management Systems
- Vehicle navigation
- Marine GPS
- Weather balloon
- Surveillance systems
- External antenna for handheld GPS

## Specifications

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<b>Mechanical</b>	Construction	Polycarbonate on top, die-cast at the bottom; rubber gasket in between
	Dimensions	34mm x 25mm x 11mm
	Weight	30g (without cable)
	Assembly	a) Magnetic b) 2 x M3 Threaded holes
<b>Cable/Plug</b>	RF Cable	RG174/U 3m standard, optionally other lengths
	Drawing force	6Kg / 5sec. molded plastic for strain relief
	Available plugs	Standard MMCX straight. Optional BNC, TNC, FME, MCX, OSX, SMA, SMB, SMC Straight or 90°
<b>Antenna element</b>	Medium Frequency	1575,42 MHz +/- 1,023 MHz
	Polarization	RHCP (Right Hand Circular Polarisation)
	Absolute profit at its zenith:	+5 dBi typical
	Gain at 10° altitude	(-1) dBi typical
	Output Impedance	50 Ohm
<b>Low Noise Amplifier (LNA)</b>	Medium Frequency	1575,42 MHz +/- 1,023 MHz
	Gain	LNA 28 dB typical
	Bandwidth	2 MHz minimum
	Noise level	1,5 maximum
	Belt damping	20 dB min. @F0 +/- 50 MHz
	Supply voltage	2,5 ~ 5,5V DC
	Electricity consumption	12 mA +/- 2 mA @3,3V
	Output Impedance	50 Ohm
<b>Overall Performance (Antenna element + LNA + Kabel)</b>	Medium Frequency	1575,42 MHz +/- 1,023 MHz
	Gain	14 dB typical
	Bandwidth	2 MHz min
	Noise level	2,0 max
	VSWR	2,0 max
	Axial ratio	3 dB max
	Output Impedance	50 Ohm
<b>Environmental conditions</b>	Operating temperature	(-40)°C ~ +85°C
	Storage temperature	(-40)°C ~ +85°C
	Relative humidity	95% non-condensing
	Watertightness	IP67 Waterproof

## Technical Drawing

