

MH 1-MG/GPS/160-174

GPS Antenna with a $\frac{1}{4} \lambda$ Mobile Antenna for the 160-174 MHz Band (VHF)

- Heavy-duty magnetic mount with toggle joint.
- External antenna whip mounted on the magnetic base (MG) which includes antenna for Global Positioning System (GPS).

DESCRIPTION

- Provided with two 5m cables attached:
 - 5 m RG 58 cable with FME-female connector for VHF.
 - 5 m RG 174 cable with SMA-male connector for GPS.
- The whip is fixed on the mount using a "hat"-screw which is supplied with the mount and a special fastening key.
- Built-in high-gain, low-noise amplifier.
- 5 V supply voltage (3 V available on request).
- DC supply via SMA-connector.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
MH 1-MG/GPS/160-174	132000152

SPECIFICATIONS

ELECTRICAL VHF	
MODEL	MH 1-MG/GPS/160-174
ANTENNA TYPE	$\frac{1}{4} \lambda$ mobile whip antenna
FREQUENCY	160 – 174 MHz
BANDWIDTH	≥ 14 MHz @ SWR ≤ 1.6
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB (acc. to EIA RS-329-1)
SWR	≤ 1.5 @ f. res.
MAX. POWER	25 W

ELECTRICAL GPS	
ANTENNA TYPE	Active patch antenna
FREQUENCY	1575 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Circular right-hand
COVERAGE	Hemispherical
GAIN (in axial direction)	28 dBic in axial direction (typ.)
CROSS POLARIZATION ATT	> 10 dB (typ.)
SELECTIVITY	> 45 dB down @ ± 45 MHz



Built-in Amplifier	
GAIN	> 30 dB (typ.)
NOISE FIGURE	< 1 dB (typ.)
P 1 dB	Approx. +7 dBm
SWR (output)	≤ 2.0
SUPPLY VOLTAGE	5 \pm 0.5 VDC (3 V resp. 12 V on request)
SELECTIVITY	> 20 dB down @ ± 100 MHz
CURRENT CONSUMPTION	Approx. 25 mA

MECHANICAL (WHIP)	
COLOUR	Black
MATERIALS	Black-chromed stainless steel
HEIGHT	Approx. 39 cm
WEIGHT	Approx. 39 g
MOUNTING	On the MG

MECHANICAL MG	
APPLICATION	Magnetic mount for toggle-joint type mobile antenna whips. With "hat"-screw and key
MATERIALS	Stainless steel Black-chromed brass Weather- and shockproof plastics
TEMP. RANGE	-35° C \rightarrow +75° C
COLOUR	Black
WEIGHT	Approx. 0.9 kg
CONNECTORS	FME-female with 5 m RG 58 cable for VHF (other connectors like BNC or TNC can be made upon request) SMA-male with 5 m RG 174 cable for GPS
DIMENSIONS	Total height: Approx. 64 mm Diameter: 130 mm
MOUNTING	Centre of vehicle roof for best omnidirectional coverage
MAX. CAR SPEED	170 km/h

INSTALLATION

The magnetic mount should be mounted in the middle of the vehicle roof or rear locker for the best omnidirectional coverage.

