

# Unity Gain 1/4 \( \lambda \) Mobile Antenna for the 450 MHz Band

## DESCRIPTION

- > Silicone covered flexible steel wire whip.
- MU 7-X/s covers 370 410 MHz MU 7-X/l covers 406 – 440 MHz MU 7-X/h covers 430 – 470 MHz
  - no tuning required.
- > Stainless steel X-mount with M6-thread whip-fastening system.
- > Simple mounting exclusively with access from the outside.
- Models available with X-mount (oblong), CX-mount (circular) and MM-mount (magnetic).
- > Choice between two connection principles:
  - X-mount, MM-mount: FME-connection (supplied without cable).
  - > XP4-mount: Permanently attached 4 m cable terminated with FME-connector.



## **ORDERING**

Model	Product No.	Frequency
MU 7-X/s	130001076	370 - 410 MHz
MU 7-X/I	130001070	406 - 440 MHz
MU 7-X/h	130001082	430 - 470 MHz
MU 7-CX/s	130001066	370 - 410 MHz
MU 7-CX/I	130001071	406 - 440 MHz
MU 7-CX/h	130001083	430 - 470 MHz
MU 7-XP4/s	130001080	370 - 410 MHz
MU 7-XP4/I	130001072	406 - 440 MHz
MU 7-XP4/h	130001073	430 - 470 MHz
MU 7-CXP4/s	130001065	370 - 410 MHz
MU 7-CXP4/I	130001068	406 - 440 MHz
MU 7-CXP4/h	130001074	430 - 470 MHz
MU 7-MM/s	130001060	370 - 410 MHz
MU 7-MM/I	130001061	406 - 440 MHz
MU 7-MM/h	130001062	430 - 470 MHz

## MOUNTS

The whip is compatible with all below mounts.











## **SPECIFICATIONS**

Electrical	
Model	MU 7-X/
Frequency	450 MHz-band covered by three models
Antenna Type	Mobile whip antenna
Max. Input Power	100 W
Polarisation	Vertical
Impedance	50 Ω
VSWR	≤ 1.2 @ f.res.
Bandwidth	≥ 45 MHz @ ≤ 1.5
Gain (EIA RS-329-1)	0 dB

Mechanical		
Materials	Whip: Steel wire covered with silicone tubing, Black-chromed brass Mount: Black-chromed brass Weather- and shockproof plastics Stainless steel	
Installation Torque	4 +/- 1 Nm	
Colour	Black	
Height	Approx. 175 mm / 6.89 in.	
Weight	X-version: Approx. 65 g XP4-version: Approx. 205 g MM-version: Approx. 275 g	
Mounting	18 mm dia. hole / 0,70 in.	

Environmental	
Operating Temperature Range	-40°C to +85°C



#### INSTALLATION

This antenna should be mounted on the car roof to ensure best omnidirectional coverage.

Mounting can take place exclusively with access from the outside when drilling an 18 mm dia. hole. Mounting can take place from the inside by drilling a 14 mm dia. hole. When mounting in a 14 mm dia. hole, remove the bottom plastic ring of the packing gasket with a sharp cutter.

When cleaning the car in car-washing machines, remove the whip using a spanner, size 9 mm. After wash, refit the whip and tighten it lightly with the spanner.

The MiniMag (abbreviated: MM) is a small, lightweight magnetic mount with a high attaching effect. A silicone layer applied to the contact surface protects the car roof and ensures maximum friction.

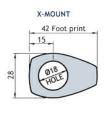
#### 3. TUNING

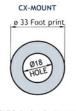
The antenna is delvered facorty-tuned and requires no futher tuning.

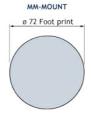
#### **PLEASE NOTE**

For safety reasons, when using the MU 7-MM, car speed must not exceed 180 km/h.

## 1. INSTALLATION DIMENSIONS

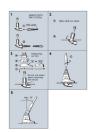






Build- in depth: 11 mm

#### 2. INSTALLATION STEP



Do not use sealer on rubber gasket or other places.