

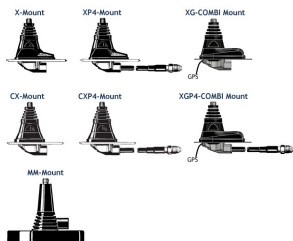
## Unity Gain $\frac{1}{4}$ $\lambda$ Mobile Antenna for the 450 MHz Band

### DESCRIPTION

- > Black-chromed stainless steel whip.
- > MU 1-X/... cover a large frequency range from 370 - 470 MHz. (See Ordering Designations.)
- > 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), XG-Combi mount (oblong with GPS) and MM-mount (magnetic).
- > Choose between four connection possibilities:
  - > X-mount, CX-mount, MM-mount: FME-connection (supplied without cable).
  - > XP4-mount, CXP4-mount: Permanently attached 4 m cable terminated with FME-connector.
  - > XG-Combi mount: FME-connection and GPS (supplied without cable).
  - > XGP4-Combi mount: Permanently attached 4 m cable terminated with FME-connector for whip and 0.15 m RG 178 with MFME for GPS.
- > Easily removable whip for car wash.
- > GPS-antenna for fixed installations.
  - > Full hemispherical coverage.
  - > Built-in high-gain, low-noise amplifier.
  - > Right-Hand Circular Polarization (RHCP).
  - > 2.85 V - 5 V supply voltage (typical 3 V).



### THE WHIP IS COMPATIBLE WITH ALL BELOW MOUNTS



### SPECIFICATIONS

Electrical	
Model	MU 1-X/..., MU 1-CX/..., MU 1-XG/..., MU 1-MM/...
Frequency	Models within 370 - 470 MHz
Antenna Type	Mobile whip antenna
Max. Input Power	100 W
Polarisation	Vertical
Impedance	50 $\Omega$
VSWR	$\leq 1.2:1$ @ f. res.
Bandwidth	$\geq 45$ MHz @ SWR < 1.5 $\geq 50$ MHz @ SWR < 2.0
Gain (EIA RS-329-1)	0 dB
Mechanical	
Materials	Whip: Stainless steel and black-chromed brass Mount: Black-chromed brass Weather- and shockproof plastics Stainless steel
Installation Torque	4 +/- 1 Nm
Colour	Black
Height	180 mm / 7.09 in.
Weight	X-version: Approx. 60 g XP4-version: Approx. 200 g CX-version: Approx. 60 g CXP4-version: Approx. 200 g XG-version: Approx. 80 g XGP4-version: Approx. 220 g MM-version: Approx. 290 g

## ORDERING

Type	Product No.	Description	Frequency
MU 1-X/s	130000866	X-mount (oblong) with FME-system	370 - 410 MHz
MU 1-X/sl	130002284	X-mount (oblong) with FME-system	380 - 430 MHz
MU 1-X/l	130000858	X-mount (oblong) with FME-system	406 - 440 MHz
MU 1-X/h	130000862	X-mount (oblong) with FME-system	430 - 470 MHz
MU 1-CX/s	130000867	CX-mount (circular) with FME-system	370 - 410 MHz
MU 1-CX/sl	130002285	CX-mount (circular) with FME-system	380 - 430 MHz
MU 1-CX/l	130000861	CX-mount (circular) with FME-system	406 - 440 MHz
MU 1-CX/h	130000859	CX-mount (circular) with FME-system	430 - 470 MHz
MU 1-XG/s	132000200	XG-Combi mount (oblong) with FME-system and GPS	370 - 410 MHz
MU 1-XG/sl	130002286	XG-Combi mount (oblong) with FME-system and GPS	380 - 430 MHz
MU 1-XG/l	132000201	XG-Combi mount (oblong) with FME-system and GPS	406 - 440 MHz
MU 1-XG/h	132000202	XG-Combi mount (oblong) with FME-system and GPS	430 - 470 MHz
MU 1-XP4/s	130000869	XP4-mount (oblong) with 4 m cable and FME-connector	370 - 410 MHz
MU 1-XP4/sl	130002287	XP4-mount (oblong) with 4 m cable and FME-connector	380 - 430 MHz
MU 1-XP4/l	130000855	XP4-mount (oblong) with 4 m cable and FME-connector	406 - 440 MHz
MU 1-XP4/h	130000857	XP4-mount (oblong) with 4 m cable and FME-connector	430 - 470 MHz
MU 1-CXP4/s	130000868	CXP4-mount (circular) with 4 m cable and FME-connector	370 - 410 MHz
MU 1-CXP4/sl	130002288	CXP4-mount (circular) with 4 m cable and FME-connector	380 - 430 MHz
MU 1-CXP4/l	130000863	CXP4-mount (circular) with 4 m cable and FME-connector	406 - 440 MHz
MU 1-CXP4/h	130000853	CXP4-mount (circular) with 4 m cable and FME-connector	430 - 470 MHz
MU 1-XGP4/s	132000205	XGP4-Combi mount (oblong) with 4 m cable, FME-connector and GPS	370 - 410 MHz
MU 1-XGP4/sl	130002289	XGP4-Combi mount (oblong) with 4 m cable, FME-connector and GPS	380 - 430 MHz
MU 1-XGP4/l	132000206	XGP4-Combi mount (oblong) with 4 m cable, FME-connector and GPS	406 - 440 MHz
MU 1-MM/s	130000849	MM-mount (magnetic) with FME-system	370 - 410 MHz
MU 1-MM/sl	130002290	MM-mount (magnetic) with FME-system	380 - 430 MHz
MU 1-MM/l	130000850	MM-mount (magnetic) with FME-system	406 - 440 MHz
MU 1-MM/h	130000851	MM-mount (magnetic) with FME-system	430 - 470 MHz
MU 1-XGP4/h	132000207	XGP4-Combi mount (oblong)	430 - 470 MHz

## INSTALLATION AND ASSEMBLY INSTRUCTIONS

➤ Please refer to the data sheet of each individual mount to find the installation and assembly instructions.

## TUNING/MODEL CONVERSION

- The antenna is delivered factory-tuned and requires no further tuning.
- To convert an MU 1-X/s model into an MU 1-X/l model, cut off 15 mm of the top end of the whip.
- To convert an MU 1-X/l model into an MU 1-X/h model, cut off 11 mm of the top end of the whip.

## PLEASE NOTE

➤ For safety reasons: When using the MU 1-MM, car speed must not exceed 140 km/h.

