

## Colinear 4 dB Mobile Antenna for the 450 MHz Band

### DESCRIPTION

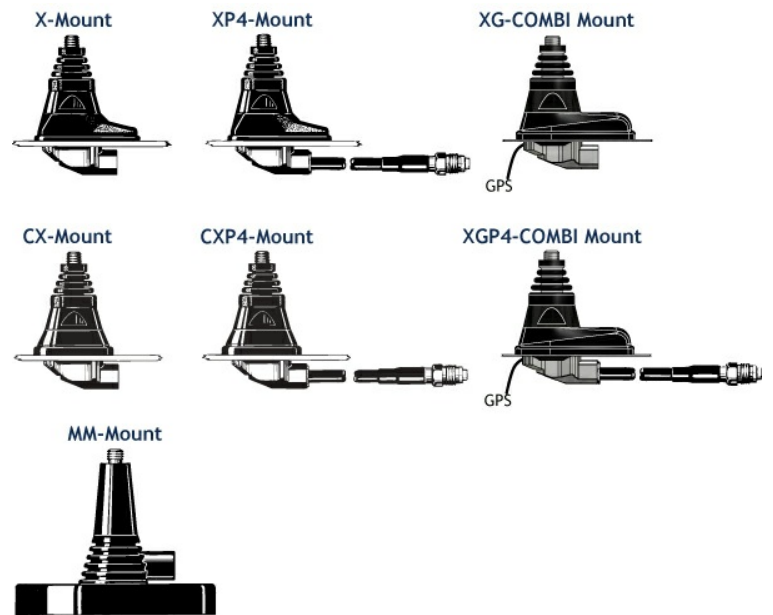
- 4 dB mobile antenna with colinear, stainless steel whip.
- Stainless steel X-mount with M6-thread whip-fastening system.
- Models available with X-mount (oblong), CX-mount (circular), XG-Combi mount (oblong) with GPS and MM-mount (magnetic).
- Choice between mounts with FME-connection (without cable) or models with permanently attached 4 m cable with FME connector.
- Choose between general purpose tunable models and permanently tuned models for cellular systems.
- 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).



### SPECIFICATIONS

Electrical	
Model	MU 4-X/..., MU 4-CX/..., MU 4-XG/..., MU 4-MM/...
Frequency	Models within 380 - 470 MHz
Antenna Type	Collinear stainless steel mobile whip antenna
Max. Input Power	100 W
Polarisation	Vertical
Impedance	50 Ω
VSWR	≤ 1.3:1 @ f. res.
Bandwidth	> 15 MHz @ VSWR < 1.5 > 30 MHz @ VSWR < 2.5
Gain (EIA RS-329-1)	4 dB
Mechanical	
Materials	Whip: Black-chromed stainless steel Black-chromed brass Mount: Black-chromed brass Weather- and shockproof plastics Stainless steel
Installation Torque	4 ±1 Nm
Colour	Black
Height	Approx. 590 mm / 23.23 in. (dep. of freq.)
Weight	X-version : Approx. 120 g / 0.26 lb. XP4-version : Approx. 290 g / 0.64 lb. CX-version : Approx. 155 g / 0.34 lb. CXP4-version: Approx. 290 g / 0.64 lb. XG-version : Approx. 170 g / 0.37 lb. XGP4-version : Approx. 310 g / 0.68 lb. MM-version : Approx. 380 g / 0.84 lb.

### THE WHIP IS COMPATIBLE WITH ALL BELOW MOUNTS



ORDERING

Model	Product No.	Description	Frequency
MU 4-X/s	130000952	X-mount (oblong) with FME	380 - 410 MHz
MU 4-X/f	130000922	X-mount (oblong) with FME	406 - 430 MHz
MU 4-X/l	130000933	X-mount (oblong) with FME	420...450 MHz
MU 4-X/h	130000927	X-mount (oblong) with FME	440...470 MHz
MU 4-X/CEL1	130000942	X-mount (oblong) with FME	450 - 470 MHz
MU 4-X/CEL2	130000941	X-mount (oblong) with FME	440 - 455 MHz
MU 4-X/CEL3	130000944	X-mount (oblong) with FME	425 - 440 MHz
MU 4-X/CEL4	130000951	X-mount (oblong) with FME	414 - 430 MHz
MU 4-X/CEL5	130001610	X-mount (oblong) with FME	380 - 410 MHz
MU 4-CX/s	130000953	CX-mount (circular) with FME	380...410 MHz
MU 4-CX/f	130000923	CX-mount (circular) with FME	406...430 MHz
MU 4-CX/l	130000934	CX-mount (circular) with FME	420...450 MHz
MU 4-CX/h	130000928	CX-mount (circular) with FME	440...470 MHz
MU 4-CX/CEL5	130001612	CX-mount (circular) with FME	380 - 410 MHz
MU 4-CX/CEL4	130000937	CX-mount (circular) with FME	414 - 430 MHz
MU 4-CX/CEL3	130000940	CX-mount (circular) with FME	425 - 440 MHz
MU 4-CX/CEL2	130000938	CX-mount (circular) with FME	440 - 455 MHz
MU 4-CX/CEL1	130000943	CX-mount (circular) with FME	450 - 470 MHz
MU 4-XP4/s	130000954	XP4-mount (oblong) with 4 m cable and FME-connector	380...410 MHz
MU 4-XP4/f	130000924	XP4-mount (oblong) with 4 m cable and FME-connector	406...430 MHz
MU 4-XP4/l	130000935	XP4-mount (oblong) with 4 m cable and FME-connector	420...450 MHz
MU 4-XP4/h	130000929	XP4-mount (oblong) with 4 m cable and FME-connector	440...470 MHz
MU 4-XP4/CEL5	130001611	XP4-mount (oblong) with 4 m cable and FME-connector	380 - 410 MHz
MU 4-XP4/CEL4	130000950	XP4-mount (oblong) with 4 m cable and FME-connector	414 - 430 MHz
MU 4-XP4/CEL3	130001474	XP4-mount (oblong) with 4 m cable and FME-connector	425 - 440 MHz
MU 4-XP4/CEL2	130000947	XP4-mount (oblong) with 4 m cable and FME-connector	440 - 455 MHz
MU 4-XP4/CEL1	130000945	XP4-mount (oblong) with 4 m cable and FME-connector	450 - 470 MHz
MU 4-CXP4/s	130000955	CXP4-mount (circular) with 4 m cable and FME-connector	380...410 MHz
MU 4-CXP4/f	130000925	CXP4-mount (circular) with 4 m cable and FME-connector	406...430 MHz
MU 4-CXP4/l	130000936	CXP4-mount (circular) with 4 m cable and FME-connector	420...450 MHz
MU 4-CXP4/h	130000930	CXP4-mount (circular) with 4 m cable and FME-connector	440...470 MHz
MU 4-CXP4/ CEL5	130001613	CXP4-mount (circular) with 4 m cable and FME-connector	380 - 410 MHz
MU 4-CXP4/CEL4	130000949	CXP4-mount (circular) with 4 m cable and FME-connector	414 - 430 MHz
MU 4-CXP4/CEL3	130000948	CXP4-mount (circular) with 4 m cable and FME-connector	425 - 440 MHz
MU 4-CXP4/CEL2	130000939	CXP4-mount (circular) with 4 m cable and FME-connector	440 - 455 MHz
MU 4-CXP4/CEL1	130000946	CXP4-mount (circular) with 4 m cable and FME-connector	450 - 470 MHz
MU 4-XG/s	130002033	XG-COMBI mount (oblong) with FME	380 - 410 MHz
MU 4-XG/f	130002034	XG-COMBI mount (oblong) with FME	406 - 430 MHz
MU 4-XG/l	130002093	XG-COMBI mount (oblong) with FME	420 - 450 MHz
MU 4-XG/h	130002094	XG-COMBI mount (oblong) with FME	440 - 470 MHz
MU 4-XG/CEL5	130002099	XG-COMBI mount (oblong) with FME	380 - 410 MHz
MU 4-XG/CEL4	130002098	XG-COMBI mount (oblong) with FME	414 - 430 MHz
MU 4-XG/CEL3	130002097	XG-COMBI mount (oblong) with FME	425 - 440 MHz

Model	Product No.	Description	Frequency
MU 4-XG/CEL2	130002096	XG-COMBI mount (oblong) with FME	440 - 455 MHz
MU 4-XG/CEL1	130002095	XG-COMBI mount (oblong) with FME	450 - 470 MHz
MU 4-XGP4/s	130002035	XGP4-COMBI mount (oblong) with 4 m cable and FME-conn.	380 - 410 MHz
MU 4-XGP4/f	130002036	XGP4-COMBI mount (oblong) with 4 m cable and FME-conn.	406 - 430 MHz
MU 4-XGP4/CEL2	130002101	XGP4-COMBI mount (oblong) with 4 m cable and FME-conn.	440 - 455 MHz
MU 4-XGP4/CEL1	130002100	XGP4-COMBI mount (oblong) with 4 m cable and FME-conn.	450 - 470 MHz
MU 4-MM/s	130000916	MM-mount with FME	380 - 410 MHz
MU 4-MM/f	130000909	MM-mount with FME	406 - 430 MHz
MU 4-MM/l	130000915	MM-mount with FME	420 - 450 MHz
MU 4-MM/h	130000914	MM-mount with FME	440 - 470 MHz
MU 4-MM/CEL5	130001614	MM-mount with FME	380 - 410 MHz
MU 4-MM/CEL4	130000912	MM-mount with FME	414 - 430 MHz
MU 4-MM/CEL3	130000911	MM-mount with FME	425 - 440 MHz
MU 4-MM/CEL2	130000910	MM-mount with FME	440 - 455 MHz
MU 4-MM/CEL1	130000913	MM-mount with FME	450 - 470 MHz

### INSTALLATION AND ASSEMBLY INSTRUCTIONS

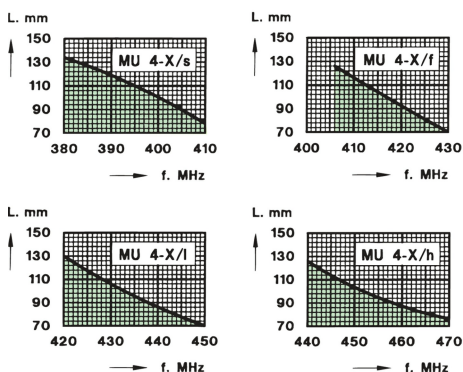
Please refer to the data sheet of each individual mount to find the installation and assembly instructions.

### PLEASE NOTE

For safety reasons: When using the MU 4-MM, car speed must not exceed 120 km/h.

### TUNING

The diagrams apply to all models in the series



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