

# MU 1-Z/...

Unity Gain  $1/4 \lambda$  Mobile Antenna for the 450 MHz Band

## DESCRIPTION

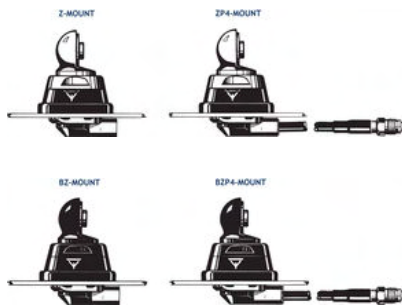
- Stainless steel whip with toggle joint.
- Type MU 1-Z/s covers 370–410 MHz  
Type MU 1-Z/l covers 406–440 MHz  
Type MU 1-Z/h covers 430–470 MHz  
– no tuning required
- Stainless steel Z-mount with ball-joint and wing screw whip-fastening system.
- Available with bright or black-chromed metal parts (mount and whip):
  - MU 1-Z/...: Bright version.
  - MU 1-BZ/...: Black version.
- Simple mounting exclusively with access from the outside.  
Choice between two connection principles:
  - Z-mount: FME-connection (supplied without cable).
  - ZP4-mount: Permanently attached 4 m cable terminated with FME-connector.



Hat screw option:



For antenna delivered with hat screw instead of wing screw add a K to the antenna designation.



## ORDERING DESIGNATIONS

MOUNT VERSION	FREQUENCY RANGE		
	370-410 MHz	406-440 MHz	430-470 MHz
Z-mount with FME-system BRIGHT	MU 1-Z/s	MU 1-Z/l	MU 1-Z/h
BZ-mount with FME-system BLACK	MU 1-BZ/s	MU 1-BZ/l	MU 1-BZ/h
ZP4-mount with 4 m cable and FME-connector BRIGHT	MU 1-ZP4/s	MU 1-ZP4/l	MU 1-ZP4/h
BZP4-mount with 4 m cable and FME-connector BLACK	MU 1-BZP4/s	MU 1-BZP4/l	MU 1-BZP4/h

## SPECIFICATIONS

ELECTRICAL	
MODEL	MU 1-Z/...
ANTENNA TYPE	$1/4 \lambda$ mobile whip antenna
FREQUENCY	450 MHz-band covered by three models
IMPEDANCE	Nom. 50 $\Omega$
POLARISATION	Vertical
GAIN	0 dB (acc. to EIA RS-329-1)
BAND WIDTH	$\geq 45$ MHz @ SWR $\leq 1.5$
SWR	$\leq 1.2$ @ f. res.
MAX. POWER	100 W
MECHANICAL	
MATERIALS	<b>Whip:</b> Stainless steel, bright polished or black-chromed Chromed brass <b>Mount:</b> Chromed brass Weather- and shockproof plastics Stainless steel
RECOMMENDED INSTALLATION TORQUE	$7.5 \pm 1$ Nm
COLOUR	Bright or black, see above
HEIGHT	Approx. 185 mm
WEIGHT	Z-version: Approx. 140 g ZP4-version: Approx. 280 g
MOUNTING	$\varnothing 21$ mm dia. hole (For roof thicknesses 2 mm up to 7.5 mm mounting hole should be $\varnothing 22$ mm dia.)
ROOF THICKNESS	Max. 2.0 mm (Models up to 7.5 mm on request)

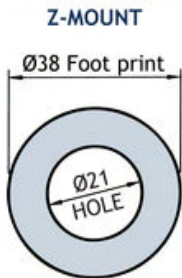
## INSTALLATION

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

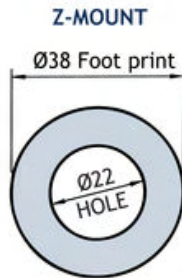
The antenna is provided with type Z-mount. The whip is fastened to the mount by means of our standard ball-joint and wings crew system. The adjustable ball-joint ensures that the whip can always be mounted in a vertical position independent of the angle of the installation spot.

The Z-mount is particularly well suited for mounting on car roofs because of its ability to be installed exclusively with access from the outside. Models with roof thickness from 2 mm to 7.5 mm mounting from the inside.

### 1. INSTALLATION DIMENSIONS:

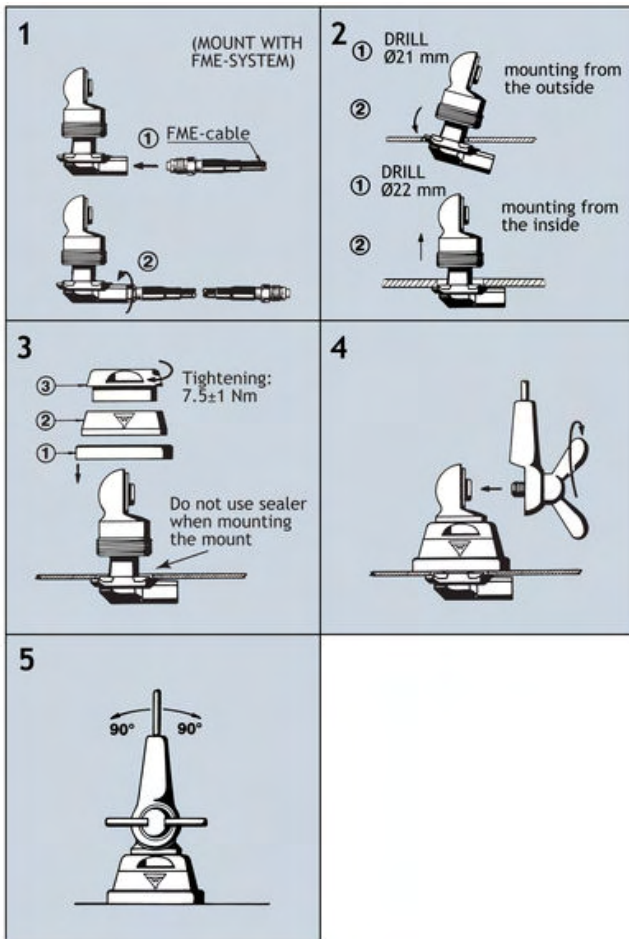


Build- in depth: 10.5 mm  
Mounting from the outside



Build- in depth: 10.5 mm  
Mounting from the inside

### 2. INSTALLATION STEPS:



Do not use sealer on rubber gasket or other places.

### 3. TUNING/MODEL CONVERSION:

The antenna is delivered factory-tuned and requires no further tuning. To convert an MU 1-Z/s model into an MU 1-Z/l model, cut off 12 mm of the top end of the whip.

To convert an MU 1-Z/l model into an MU 1-Z/h model, cut off 10 mm of the top end of the whip.

### PLEASE NOTE

As standard the antenna is provided with wing screw. However, the wing screw may be replaced by the less obtrusive hat screw (with key), which also gives an improved protection against theft. To order the antenna with hat screw, please add a "K" to the antenna designation.



PROCOM A/S reserve the right to amend specifications without prior notice.

05/08/2010