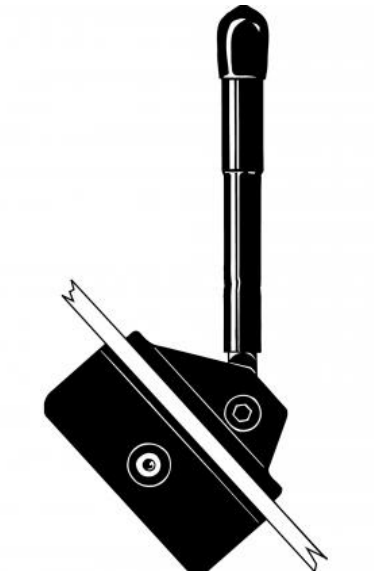
Dual-frequency GlassFix® Antenna for the 900 MHz and 1800 MHz Bands



DESCRIPTION

- Dual-frequency antenna using the GlassFix®mounting principle.
- Covers both EGSM/NMT-900 and DCS-1800/PCN in one antenna.

NOTE:
GF antennas are not suitable for car models with windows that have heat reflective coating.

- For direct use with:
  – an EGSM/DCS-1800/PCN mobile phone (single or dual-band)
  or
  – an EGSM and a DCS-1800/PCN mobile phone (requires diplexer, type DIPX 1000/1550).
- Mounting on car window glass – no holes required.
- Instant-adhesion procedure for fast and reliable fixing.
- Half-wave design – no ground plane required.
- Internal matching unit provided with FME-connection (FME-cable to be ordered separately).
- Simple tuning procedure by means of tuning screw on matching unit.
- Swivel joint for 180° angle adjustment of the antenna.
- If removal of the antenna installation is necessary, a quick dismantling procedure leaves no trace of the installation.

SPECIFICATIONS

Electrical	
Model	GF 900/1800
Frequency	880-960 MHz (EGSM/NMT-900) 1710-1880 MHz (DCS-1800/PCN)
Antenna Type	Dual-frequency GlassFix®antenna
Max. Input Power	25 W
Polarisation	Vertical
Impedance	50 Ω
VSWR	≤ 2.0 @ f.res.
Bandwidth	900 MHz : Approx. 25 MHz @ VSWR = 2.0:1 (typ.) 1800 MHz : Approx. 100 MHz @ VSWR = 2.0:1 (typ.)

Mechanical	
Materials	Whip : Black-chromed stainless steel Black-chromed brass Mount and indoor unit : Environment-proof plastics Corrosion-safe and corrosion-protected metals
Cable	FME-cable to be ordered separately
Colour	Black
Height	Approx. 100 mm / 3.94 in.
Weight	Approx. 0.06 kg / 0.13 lb.
Mounting	On car windows (52 mm x 47 mm obstruction-free mounting area required)
Glass Thickness	2.5 - 7 mm / 0.10 - 0.28 in.

ORDERING

Model	Product No.
GF 900/1800	130001136

FME-SYSTEM ACCESSORIES

FME-CABLES	
LENGTH	TYPE NO.
1 m	1 m FME
2 m	2 m FME
3 m	3 m FME
4 m	4 m FME
5 m	5 m FME
6 m	6 m FME
4 m white	4 m FME-white
6 m white	6 m FME-white
12 m white	12 m FME-white
18 m white	18 m FME-white

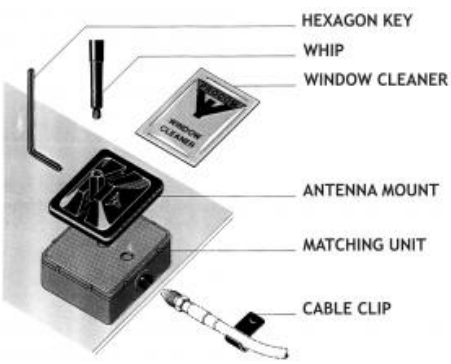
FME-CONNECTORS	
CONNECTOR	ORDER NO.
FME-FME	FME-FME
Prolongation	FMEP
N	FME-N
FSMA	FME-FSMA
BNC	FME-BNC
TNC	FME.TNC
UHF	FME-UHF
Mini-UHF	FME-MUHF
Elbow-MUHF	FME-EMUHF
Elbow-BNC	FME-EBNC
Elbow-TNC	FME-ETNC
SMA	FME-SMA

For further information about other types of FME-cables please compare the cable data sheets under accessories in our catalogue.

OPERATION USING A DIPLEXER

In case of operating two transceivers on one antenna at the same time, a diplexer, type DIPX 1000/1550, is necessary to complete the system. The tasks of the diplexer are to protect the two receiver inputs from being destroyed by the transmitter in the contrary band, and to ensure a low-loss path between the transceiver and the antenna, which is not loaded by the other branch. For further details please see the separate data sheet on the DIPX 1000/1550. The diplexer fully covers both bands and, consequently, tuning to specific frequencies is not required.

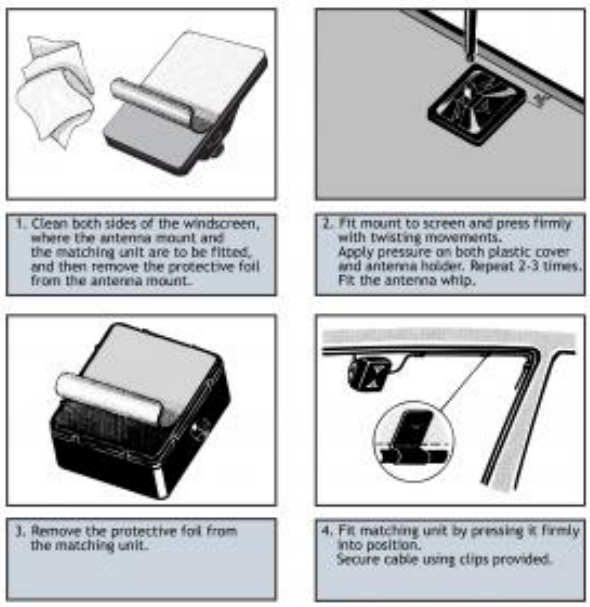
ASSEMBLY DETAILS



1. BEFORE INSTALLATION

- When selecting mounting location take into consideration: positions of back view mirror, wiper blade paths and defogger wires (when mounting on rear window). The driver's view should not be obstructed.
- Max. allowed curvature of the glass surface on the mounting spot is 2 mm deflection per 100 mm length.
- Environmental- and car temperature must be above 15° C at installation, and installation surfaces must be dry and clean.

2. INSTALLATION



Do not use sealer on rubber gasket or other places.

3. TUNING INSTRUCTIONS

- Insert a forward/reflection-type wattmeter between the transmitter and the antenna.
- Key the transmitter and observe the forward and the reflected power.
- Adjust the tuning screw on the matching unit until minimum returned power is obtained. For duplex operation, the antenna can be off-tuned slightly to favorize the matching on the Rx. Turning the screw clockwise will shift the antenna resonance to a lower frequency and vice versa. The VSWR on the Tx should, however, never exceed 1:1.5.

4. ADHESION ADVICE

- It is essential for a good adhesion result that the surfaces are properly cleaned and dry.
- A high application pressure improves the binding power.
- Ideal application temperature range is +20 °C to +38 °C but may be extended down to +15 °C. When applied, binding strength is maintained between -30 °C and +70 °C.
- Binding power increases considerably with time. To ensure full strength of the assembly it is recommended to keep the whip off the mount for 24 hours.To accelerate attainment of full binding power, the joined parts may be heat-treated with a warm-air gun.
  PLEASE NOTE: Do not heat parts to more than 65 °C and take care not to spoil other nearby car parts.

REINSTALLATION KIT

A reinstallation kit including all necessary parts for transfer of the antenna to another vehicle is available under order No. »GF-RK 900/1800«.

WARNING

SAFETY PRECAUTIONS

Antennas mounted on the windscreen may cause relatively high field strengths in the passenger cabin and near the dashboard.

- To prevent health hazard due to RF radiation, persons must not be closer than 30 cm to the antenna whip (transmitter output power to the matching unit: 20 watts). (DIN 57 848).
- The RF signals at the dashboard may cause interference in the car's electronic equipment such as broadcast radio, computer automatics, braking systems, electronic ignition, relays etc. Some cars are more susceptible to disturbances than others.It is the responsibility of the installer to carry out a thorough check of the proper functioning under any conditions of such circuits before finishing installation.

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