

# GSM-R Communication Stations



## General

GSM-R Communication Stations are developed for railway emergency and conversation purposes at train stations and routes. Providing all ASCII-features of GSM-R it is an attractive and reliable part of the radio-based railway communication network. By using solar power supply it operates independently and almost regardless of location (radio reception), therewith cable laying is not necessary.

## Structure and Function

Our station is structured in the following main parts:

- Base Module (station body, electronic unit, accumulator)
- Power Supply Module
  - Mains-operated version, 230V AC
  - Solar-operated version either integrated or separate solar unit

Basically, the GSM-R Communication Station is equipped with a hands-free speaking system. Optionally, a version with an additional handset is available. The device has up to 3 programmable one-touch dial buttons.

Photon Meissener Technologies GmbH  
Niederauer Straße 44  
D-01662 Meißen  
Telefon +49 3521 726-0  
Telefax +49 3521 726-177  
MT@PhotonAG.com  
www.MT.PhotonAG.com

## Base Module

Every electronic unit consists of GSM-R module, antenna, microphone/loudspeaker and alternatively a handset. All important components are periodically and automatically checked by a self test. A text message is promptly generated in case of detected sabotage or malfunction (option).

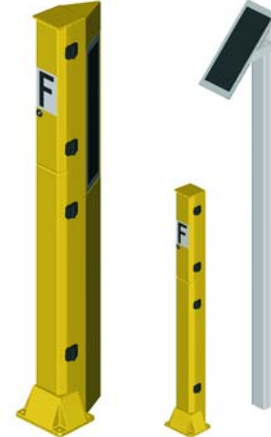
## Power Supply Module

The mains-independent version with integrated solar unit permits a conversation of 15 min average per day. With the separate solar panel the talk time can be customised. Every base module contains an accumulator.

### Mains-operated



### Solar-operated



GSM-R Station and Separate Solar

## Specifications:

Usage Area:	climate category T1 DIN EN 50125-3, outdoor
Operating Temperature:	-25°C to +55°C
Protection Class:	IP54 according to DIN EN 60 529
Dimensions:	1605 x 130 x 130 (HxWxD in mm)
Station Body:	glass fibre reinforced polyester
Frequency Band:	GSM 900 incl. R- and E-band, DCS 1800
Transmitting Power:	2W (GSM-R) / 1W (DCS)
Reception Sensitivity:	-102 dBm
Operating Voltage:	6 V
Current Consumption:	active mode - ca. 300 mA standby mode - ca. 15 mA
Loudspeaker:	loudness adjustable, max. 100 dB/A/0,3m
Talk Time:	depending on the power supply module
Dial Buttons:	up to 3 one-touch dial buttons, max. 4 programmable numbers per button
GSM-R Features:	eMLPP, UUS1, VBS, VGCS

The Quality Assurance of Photon Meissener Technologies GmbH has been certified according to the international standard DIN EN ISO 9001:2000.

