

Intrinsically-Safe Two-Way-Radio Ex-PMR 1000

Communication in Ex-areas

Safe and reliable communication is an important aspect in Ex-hazardous areas. Stringent requirements have to be satisfied by all radio transceivers used, to ensure a safe communication, even over long distances.

The ecom Ex-PMR 1000 portable radio transceiver was developed specifically for this purpose. Featuring ATEX certification in protection class Ex II 2 G Eex ib IIC T4 or Ex II 3 D T I 30°C IP 54, the device complies with the very latest standards and can be used in Zones 1 and 2, or 22.

The frequency band ranging from 446.000 MHz to 446.100 MHz was opened for public use by the ERC with the publication of its decision ERC/DEC/(98) 25, 26, 27 dated 1 December 1998. All handheld devices with fixed antenna which operate in this frequency range conform to the ETS 300296 licensing standard and are allowed to be used license- and charge-free in many European countries.

The Ex-PMR 1000 fulfils the rigid specifications of IP54 and therefore meets the high demand for industrial ruggedness and reliability especially for applications in Ex-hazardous areas.

The maximum transmission power is limited to 500 mW ERP, giving a range of up to 5 km. The CTCSS and DCS pilot tone systems are configured for selective analogue and digital coding. A variety of pilot tones enables users to communicate within groups. All functions of the radio unit can be easily preconfigured via PC using the optional software kit.



The Ex-PMR 1000 is a license and charge-free two-way radio for wireless communication in Ex-hazardous areas.

- 8 channels
- DCS selective call for transmission and reception
- Up to 5 km range
- Scan function
- Approved for dust-Ex-areas (zone 22)
- Squelch tail elimination (9 levels)
- TOT (transmission time limit)
- Battery save function
- IP54 protection rating

Ex-data:

Ex-designation:

- ⊕ II 2 G EEx ib IIC T4
- ⊕ II 3D T I 30°C IP54

Type examination certificate:
ZELM 05 ATEX 0271

Standard delivery:

- Radio unit Ex-PMR 1000
- Ex-battery pack Ex-AM PMR 1000
- Belt clip for Ex-PMR 1000
- Charger LS PMR 1000
- Power supply unit PS PMR 1000
- Operating instructions

Optional accessories:

- Leather carrying case
- Remote speaker / microphone combination Ex-HS 01
- Spare battery pack
- Charging Set
- Software kit

Technical data:

Frequency range:	446,00625 - 446,09375 MHz
Sensitivity:	approx. 0,25 μ V at 12 dB SINAD
Channel spacing:	12,5 kHz
Max. transmission power:	500 mW ERP
IP protection:	IP 54
Battery:	Rechargeable lithium ion
Ambient temp.:	-20°C ... +50°C
Operating time:	approx. 12 hours (90% standby, 5%TX, 5%RX)
Weight:	approx. 430g