



## PST – programmable early-warning telephone

 Certificate: ATEX



### Technical parameters:

Model	I M1 Exia I, II 2G Exia IIBT4
Allowable voltage for binary output	max. 24 V
Allowable current for binary output	max. 50 mA
Normal signal levels	0 dBm
Dialing digits	DTMF
Case	IP65
Dimensions	520 x 253 x 110 mm
Weight including battery	4.75 kg

### Use:

Programmable early-warning telephones of the PST type are meant for working under arduous industrial conditions (high humidity, noise, dust, risk of explosion).

They were designed for working in spaces where gases, vapors, gas fumes and explosive mixtures classified in I and II explosive groups are regularly found. They can be used in mines, in factories for processing coal, in manufacturing halls, in warehouses, in pumping stations, in plants that manufacture industrial gases and in other places where the risk of explosion from methane and other gases classified in group IIB exists. The use of anti-explosive safeguards in compliance with ATEX guidelines enables it to be classified in categories of equipment that provide a very high level of safety.

For group I, these early-warning phones are classified in category M1 and for group II in category 1. Their feature is anti-explosive construction Exia/IIB T4 and sealant level IP65.

The high volume of the warning signal and easily visible optical indication ensure effective summons even in places with a high noise level.

The PST early-warning telephones can be connected with a randomly automatic telephone center using line-separating modules LPI (LPI-Z) or line modules LPZ together with modules for spark-proof separation, which should correspond to the design feature. Accessibility is only possible in cooperation with centers equipped with DTMF receivers.

**The catalogue has only those selected important parameters for your final decision. For project designs always ask for the user's guide for this product and any engineering consultation about possible uses.**



## TPN – telephone for making calls during heavy industrial operations



### Technical parameters:

Power source	from telephone center 60 or 48Vss
Nominal signal levels	0 dBm
Audible level of calling out	minimum 90db from a distance of 1m
Choice of numbers	PD/DTMF
Numbers in memory	repeating the last number, memory with immediate accessibility – 3x16 digits, memory with subsequent accessibility – 10x16 digits
Optical signal	seen from a long distance
Surrounding temperature	-20°C to +40°C
Case	IP 65
Dimensions	275 x 140 x 90 mm
Weight	ca 2.5 kg

### Parameters of lines:

Max. resistance of the line	700 Ohm
Min. resistance between conductor wires and between each conductor wire and ground	20 kOhm
Max. capacity between conductors	0.8 uF
Max. Induction	7 mH

### Use:

The TPN type telephone is used for making calls during heavy industrial operations and is designed for environments with a high level of humidity, even dripping water, and of dust (e.g. coal, rock, etc.) in an IP 65 case. The telephone can be used in cooperation with a random telephone center.

### Possible phone variations:

- TPN – basic version
- TPN-S – version with optical early-warning indicator
- TPN-D – version with another earpiece
- TPN-SD – version with an earpiece and optical early-warning indicator

### Description:

The case of the TPN telephone is made out of plastic, providing an IP65 degree of protection. The keypad consists of membrane buttons and includes in addition AWIZO, DYSP.ALARM buttons, which work with circuits of memory digits, and M, FLASH, R/P operational buttons. The phones work in a system of frequency coding DTMF, or PM decade with tp/tz set up. This allows it to work with any telephone center from the older types up to the latest generation of centers. The excellent indication of calling and audibility guarantee that the electronics of the telephone ensure a controlled signal level during changes in the impedance of the line, furthermore the audible level of the call signal (over 90 dB) and the optical early-warning indicator. These qualities allow it to be used in spaces with high noise levels.

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