telegrafia®

# EMA
## Professional

High-performance monitoring station of a new generation

# Product description

**EMA Professional** is a new generation of **high-performance monitoring stations**, designed primarily **for sophisticated early warning systems** or systems requiring **multi-channel communications** using large-sized communication devices that need to be placed in a single box. The monitoring station is also suitable for industrial automation applications.

According to a type of sensors connected the station can monitor **weather conditions, water levels**, the **stability of building structures**, and **the presence of hazardous substances** in the environment. It can also **control valves, motors and actuators**. It assesses risks on a multi-level basis. The **EMA Professional** monitoring station sends the values it measures and calculates through various communication channels to warning control centres or mobile phones, or it can directly activate electronic sirens, PA systems, or beacons. It is a modular device providing a virtually **unlimited number of inputs/outputs**.

An innovated power supply source/charger allows **multi-level charging of backup batteries with overcharge protection**, thereby extending their life. At the same time, it performs battery load testing at set intervals and notifies users of the monitoring station of the battery replacement. The station is housed in a stainless steel box and can be installed either outdoors or in industrial environments without the necessity of any additional protection.

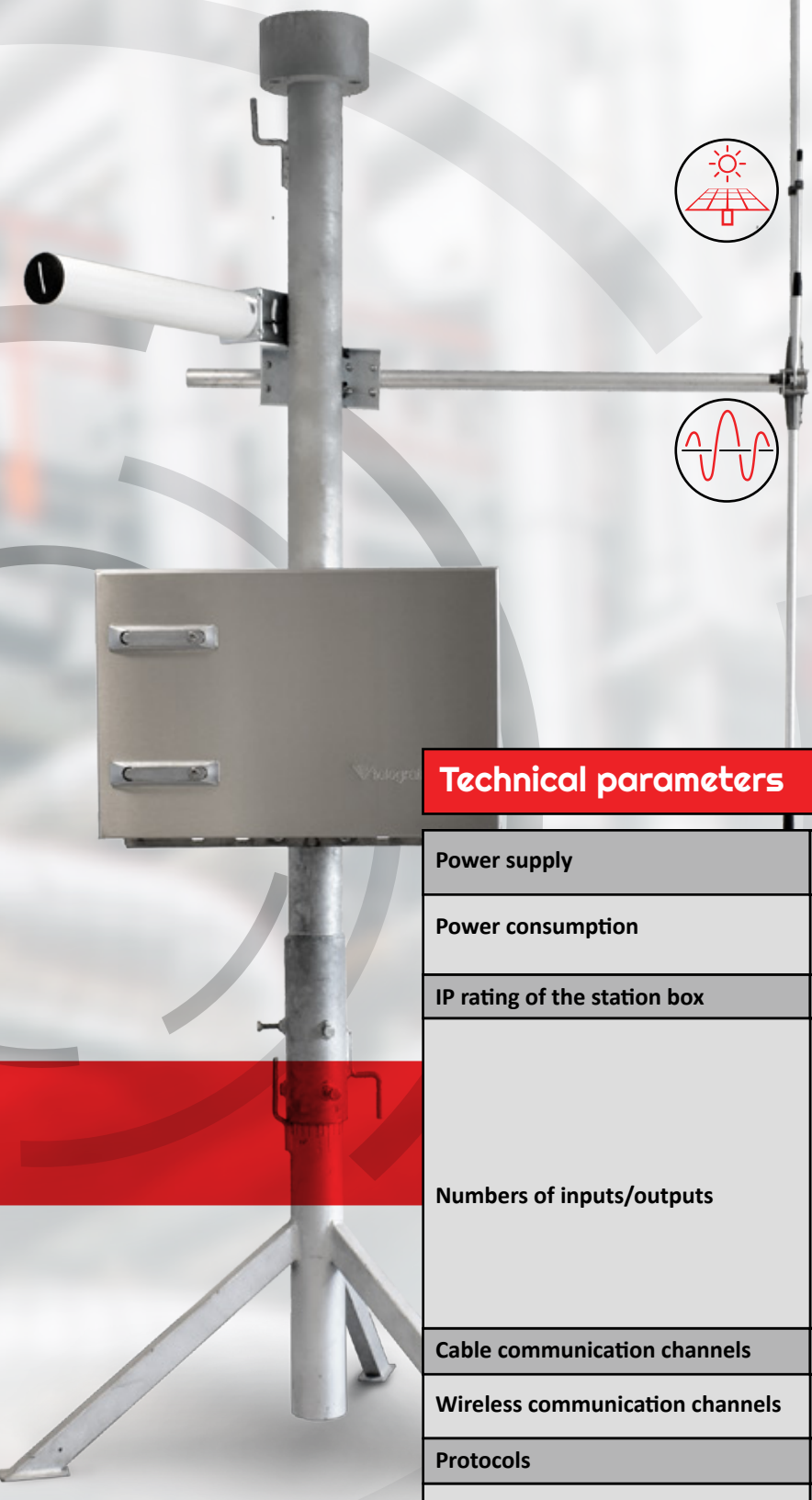
## High-quality professional monitoring stations for warning systems

# Key features

### Compactness
A modular yet incredibly compact monitoring device – all in one robust stainless steel box.

### Flexibility
The station has a virtually unlimited number of interfaces for different sensors and simple configuration, and it finds its application even in the most sophisticated monitoring and automation systems.

### Intelligence
Built-in applications allow multi-level risk assessment, communication either directly with electronic sirens, warning control centres, or mobile devices. Working parameters can be changed remotely using a sophisticated management system. An innovated power supply source/charger allows multi-level charging of backup batteries with overcharge protection, thereby extending their life.



## Communication

The station communicates with all standard wireless and wired communication channels – through GSM and mobile operator networks, WiFi, Ethernet, RS232, RS485, and analogue radio. Due to its dimensions, the box can house even large-sized communication devices.

## Solar power supply and mobility

The device can be powered not only from the standard 120-230V mains but also from solar cells, making it a completely autonomous station that can be placed virtually anywhere and also designed as a portable unit.

## Sounding

The station can work as a connecting, intermediate link to ensure live-voice transmission from control centres to warning sirens, PA systems, and loudspeakers at the place of their installation. Besides, it can be equipped with an electronic amplifier and an acoustic control unit so that it can perform the function of a siren or PA system itself.

## Technical parameters

| | |
|---|---|
| **Power supply** | main: 90 V – 264 V AC / 50 Hz, 60 Hz<br>solar: 12 V, panel min. 50W* |
| **Power consumption** | max. 200 W during the battery charging process<br>max. 5 W in standby mode with fully-charged batteries (without sensors) |
| **IP rating of the station box** | IP54/IP66* |
| **Numbers of inputs/outputs** | **Uniquely defined binary inputs and outputs**<br>8 binary inputs / 2 binary outputs<br>• Inputs: passive, switch-to-ground<br>• Outputs: open drain, max. 100 mA/50 V<br>**Configurable/User-defined binary inputs/outputs**<br>24 to 384 of configurable binary inputs and outputs<br>• Inputs: passive, switch-to-ground<br>• Outputs: open drain, max. 100 mA/50 V<br>**Configurable analogue inputs**<br>8 to 128 of configurable analogue inputs with galvanic isolation<br>• voltage sense mode: 0 – 30 V<br>• current sense mode: 4- 20 mA |
| **Cable communication channels** | RS232, RS485, Ethernet* |
| **Wireless communication channels** | WiFi*, GSM mobile data*, GSM SMS*,<br>analog radio*, digital radio* |
| **Protocols** | TLG2, MODBUS* |
| **Dimensions of the station box** | 400×600×350 mm<br>650×600×350 mm* |
| **Weight of the station box (without batteries)** | 21 kg<br>25 kg* |
| **Operating temperature range** | -25°C to +65°C |

∗ optional item

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