

 telegrafia®

# EMA Industrial

**New generation industrial  
monitoring and control station**



# Product description

**EMA Industrial** is the **most powerful new generation modular monitoring and automation station** produced by the Telegrafía company. It is designed for large and sophisticated systems with a high level of automation. Not only does it allow the continuous collection and evaluation of data from hundreds of sensors, but it also communicates and controls other SCADA systems according to pre-programmed scenarios. For the most extensive industrial sites, it is possible to connect several EMA Industrial stations into a single functional unit while using the existing technological infrastructure and standardised rack cabinets.

According to a type of sensors connected, the station can **monitor the presence of hazardous substances** in industrial and storage areas, the **stability of building structures**, as well as weather conditions and water levels in streams, rivers, tanks, and mud or sludge pits. **It can assess a variety of risks on a multi-level basis.** Besides monitoring, it can also control and put into operation lighting systems, beacons, valves, motors and actuators.

The **EMA Industrial** monitoring station sends the values it measures and calculates through various communications channels to warning control centres or mobile phones, or it can directly activate electronic sirens, PA systems, or other devices. It is a modular device **providing a virtually unlimited number of inputs/outputs.**

If necessary, it is possible to deploy several **EMA Industrial** monitoring stations all over the industrial area and use the existing communications infrastructure or complement it with other suitable communications modules. 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 necessity of battery replacement. The station is housed in a rack cabinet.

## High-quality professional monitoring station for warning systems



# Key features



## Modularity and flexibility

The modularity of the EMA Industrial monitoring station greatly facilitates the optimised deployment of stations within the industrial area according to routine safety monitoring requirements. The station contains a virtually unlimited number of interfaces for various sensors; it is easily configurable and applicable in even the most sophisticated monitoring and automation systems.



## Intelligence

Built-in applications provide for multi-level risk assessment, communications either directly with electronic sirens, evacuation PA systems, warning control centres or mobile devices. Due to a sophisticated control system, all working parameters can be changed remotely. An innovated power supply source/charger allows multi-level charging of backup batteries with over-charge protection, thereby extending their life.



## Communications

The station communicates with all standard wireless and wired communication channels – through GSM and mobile operator networks, WiFi, Ethernet, RS232, RS485, and analogue radio. It can be connected to the existing cable networks, including the common computer infrastructure.



## 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.



## Solar power supply and mobility

The device can be powered from the standard 120-230V mains, but also solar cells, thus making it a completely autonomous, portable station that can be situated virtually anywhere.

## Technical parameters

<b>Power supply</b>	mains: 90 V – 264 V AC / 50 Hz or 60 Hz solar panels*
<b>Power consumption</b>	max. 200 W max. 5 W in standby mode
<b>Numbers of inputs/outputs</b>	<p><b>Uniquely defined binary inputs and outputs</b> 8 binary inputs / 2 binary outputs</p> <ul style="list-style-type: none"> <li>Inputs: passive, switch-to-ground</li> <li>Outputs: open drain, max. 100 mA/50 V</li> </ul> <p><b>Configurable/User-defined binary inputs/outputs</b> 24 up to a virtually unlimited number** of configurable binary inputs and outputs</p> <ul style="list-style-type: none"> <li>Inputs: passive, switch-to-ground</li> <li>Outputs: open drain, max. 100 mA/50 V</li> </ul> <p><b>Configurable analogue inputs</b> 8 up to a virtually unlimited number** of configurable analogue inputs with galvanic isolation</p> <ul style="list-style-type: none"> <li>voltage sense mode: 0 – 30 V</li> <li>current sense mode: 4- 20 mA</li> </ul>
<b>Wired communications channels</b>	RS232, RS485, Ethernet*
<b>Wireless communications channels</b>	WiFi*/ GSM mobile data*/ GSM SMS* analogue radio*/ digital radio*
<b>Protocols</b>	TLG2, MODBUS*
<b>Dimensions of the station box</b>	height 4U to be housed in a 19" rack cabinet depth 100 mm / 200 mm
<b>Weight of the station box (without batteries)</b>	3 kg / 6 kg
<b>Operating temperature range</b>	-25°C až +65°C

\* optional item

\*\* The actual number depends on exact project specifications



telegrafia

 telegrafia®



**Telegrafia a.s.**  
Lomená 7, 040 01 Košice

[sales@telegrafia.sk](mailto:sales@telegrafia.sk)  
[www.telegrafia.eu](http://www.telegrafia.eu)