



# STATION ANALOGUE CLOCK

Type: SZW

Clocks are an indispensable element of the passenger information system at railway stations, and airports. Their appropriate size, quantity and arrangement should be selected according to the size of the facility. Clocks should be precise and reliable.

## **Product description**

We present the SZW station analogue clock available in one-sided or double-sided version with or without a second hand. It is an electrically powered mechanical model. Different power versions are also available. Clocks can be manufactured in a round or square shape and in different colours. You can order non-standard clocks, of various shapes, sizes and colours.

#### Time measurement

Clock precision is provided by time synchronization with the standard located on the NTP time server using LAN / WAN. We use any available communication medium. The clock can work with a number of NTP time servers. If the time is not synchronized for more than 7 days, the clock is set to 12.00. This should be interpreted as a clock failure condition. After resuming synchronization, the clock automatically sets the correct time and goes into regular operation mode.

### **Clock case**

The clock has a vandal-resistant case. The dial and hands are secured with a polycarbonate glass, which is about 200 times more durable than a regular glass.

The clock has energy-saving dial backlighting made in LED technology. Appropriate selection of light sources and their allocation ensures homogeneous illumination, without shadows and overlighting. It is possible to adjust the brightness of the clock backlight.









## **Working conditions**

The outdoor version of the clock is equipped with a heating and ventilation system with automatic control and monitoring. Due to this fact, the clock can operate in the extended range of external temperatures. The clock and environmental conditions as well as many parameters can be monitored using the remote access application. Thanks to the built-in clock controller, it is possible to implement other non-standard actions and functions.

### **Power supply**

A number of different power sources can be connected, which ensures the clock flexibility and reliability. Separation of individual energy receivers, including the clock mechanism, the ventilation, heating, and lighting systems, facilitates energy management and gives great configuration options. Clocks powered from 230 VAC network or optionally powered from Ethernet network (PoE 802.3af standard) are available. 48V power supply requires the use of additional PoE power supplies or LAN switches with PoE power supply. In this case, only the clock mechanisms are powered. The use of both power supplies in one clock ensures the redundancy of power supply to the mechanisms.

#### **Maintenance**

Under normal operating conditions, the clock automatically corrects the time indication and does not require special supervision. It is recommended to clean the clock case and glass at regular intervals. Maintenance operations should be performed in accordance with the user's manual.

### **Servicing**

The clock has many self-monitoring functions that enable to indicate its incorrect operation and allow for its automatic restart. Remote access also allows for its diagnosis and service over the LAN network. The service procedure comes down to checking the LAN connections and power supply. If it does not help, call the service. If other irregularities are found, follow the instructions in the user manual or contact the supplier or manufacturer.

### **Technical parameters**

### **Mechanical parameters**

- *Dimensions (diameter* × *depth):* 720x250 mm (dial diameter 630mm)
- Weight: About 25 kg
- Installation: Pillar, wall and ceiling
- Colour: Standard: RAL 5005 or RAL 7047, others on request
- Glass: Transparent polycarbonate glass with a UV-resistant coating
- Case: Plastic (PE)

# **Electrical parameters**

- Power supply: 230V AC
- Network interface: Ethernet 10/100 Mbit/s
- Operated network protocols: NTP, SNTP, SNMP v.2, DHCP, IPv4, IPv6, UDP, Multicasting, integration with the network management system (SNMP manager)

#### **Working conditions**

- Operating temperature: From -40°C to +55 °C (outdoor working conditions)
- *Humidity:* Relative humidity up to 95%
- *Impact resistance of the clock case:* IK07
- Level of protection against water and dust: IP65



