



# UNIVERSAL SUPERVISORY SYSTEM

- Electronic system of the remote supervision designed for monitoring of conditions inside the telecommunication technologies
- 16 logic inputs, 16 logic outputs, internal and external thermo-sensors
- Communication and control by standard protocols (HTML, SNMP, NTP, SYSLOG)
- Possibility of a simple integration into central supervisory systems



### General description

Universal supervisory system (UDZ) has been designed for monitoring of operating conditions in telecommunication technologies and their remote checking. It enables measuring of temperature at several places inside telecommunication switchboards (1–3 external sensors, 1 internal sensor in UDZ), monitoring of a state in 16 logic inputs with adjustable sensitivity to 5 V, 12 V, 24 V or 48 V, switching of 16 logic outputs by switching relay. Detection of the current state and configuration of equipment can be carried out over Ethernet interface

by www browser. The states if inputs and outputs can be transmitted to the control centre by SNMP.

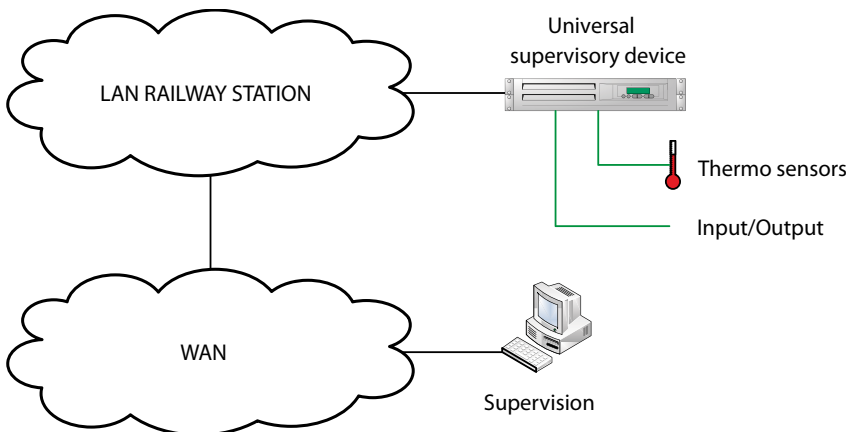
The objective of the UZD usage is its integration into the superior SUPERVISORY SYSTEM and simplification of remote diagnosis of telecommunication systems failures.

### Basic technical description

UDZ is built in the box designed for installation into 19" rack, height 2U and depth 35 cm. Weight is 5,5 kg. On the front panel there are two Ethernet connectors (one for plugging into the system, the other

one for connecting of the service technician), LED indicating the current state of inputs, outputs and UDZ itself, and alphanumeric LCD display displaying details of the current UDZ state. In addition the front panel includes fuse case for the UDZ power supply fuse. The rear panel is equipped with EURO plug for connecting 230 V power supply and with connector for optional connecting of 48 V DC power supply, furthermore 16 connectors for logic inputs, 16 connectors for logic outputs and 3 connectors for the external thermo-sensors.

In the standard version UDZ is designed for the 230 V AC backed-up power supply, optionally the internal switching power source can be replaced by DC-DC converter for input voltage 48 V (36–72 V) DC. The power intake of the entire UDZ does not exceed 50 W, typically around 20 W (for both 230 V AC power and also 48 V DC power).



Interconnection of the Supervisory System with environment





Logic inputs are defined for scanning the voltage state of external equipment and they are galvanically separated by optocouplers both in direction to UDZ, and between each other. UDS sensitivity can be set by shorting jumpers for 5 V, 12 V, 24 V or 48 V.

Logic outputs are realized by switching relays. Maximum switching current is given by the applied relays, for 230 V AC version it is 6 A and for 48 V DC version it is 4 A. If higher currents are required it is possible to use external contactors.

External thermo-sensors are designed for monitoring temperatures inside telecommunication switchboard, where UDZ is installed. The resolution of thermo-sensors is limited by SW to 1 °C and the absolute accuracy is 2 °C.

### Basic technical parameters

Dimensions	19" module, height 2U, depth 35 cm (without connectors), width (without holders) 43 cm, depth 40 cm (with connectors?), height 13 cm Supervisory system is designed for the installation into 19" (rack) of the switchboard.
Weight	5,5 kg
Cover	IP20
Working temperature range	0 to 45 °C
Storage temperature range	-20 to 60 °C
Humidity	20 to 80 % non-condensing
Rated input voltage	230 V ±10 %, 50Hz
Input current maximum	1 A
Logic inputs	galvanically separated, sensitivity optional 5 V, 12 V, 24 V or 48 V
Logické výstupy	230 V střídavých, max. 6 A nebo 48 V stejnosměrných max. 4 A
External thermo- sensors	resolution 1 °C, absolute accuracy 2 °C
Connectors	LAN (Ethernet) – 2× RJ45
	230 V intake – EURO plug
	48 V intake – optional
	logic inputs - 2 two-pin plugs PA256/7, cable plugs PA256/7,62 are a part of a supply
	logic outputs - 230V AC, max. 6A – five-pin plug PA256/7,62, 48 V DC – four-pin plug PA256/7,62 – the conductor cross section max. 2,5 mm <sup>2</sup> , cable plugs PA256/7,62 are a part of a supply
	external thermo-sensors – SubD 9 pins, socket
	grounding terminal clip