### **METIS**



## 5x 10/100Mbit/s Ethernet Switch with one or two optical ports

- Connection of LAN Ethernet 100/10 Mbit/s through one ( METIS ) or two ( METIS-2P ) fiber optic interfaces
- Possibility of work in BUS configuration (METIS - 2P)
- Built-in Ethernet switch with an array of 1000 MAC addresses
- IEEE 802.1q support. Possibility of defining up to 15 VLAN networks (full range VID)
- Supports programmable rate limiting on Ethernet ports (from 64kbit/s to 100Mbit/s)
- Configuration through a dedicated RS-232 interface

#### Description of the device

#### Characteristic

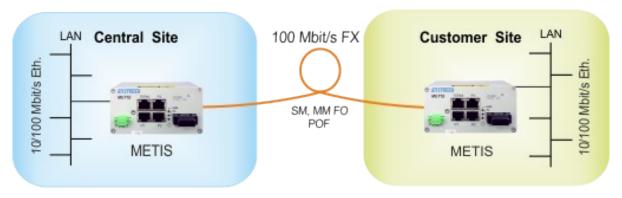
METIS is four(five)-port Ethernet switch equipped with three electric and one (two in case of METIS-2P) optical interfaces.

METIS has a built-in advanced VLAN mechanisms and flow control functions which

allow to seperate available bandwidth with no additional hardware. Wide range of available optical interfaces, for single-mode, multimode and plastic fibers extends it's functionality.

METIS is also avaiable in rack-mounted version (METIS-R) for RCK-ANY-01 rack shelf.

#### A standard application is presented in the drawing below:



The sample application, illustrating the connection of peripheral systems to measure the detectors or measuring environmental parameters in power stations unattended



#### Technical specifications

#### **Supported transmission standards**

- IEEE 802.3 10Base-T Ethernet
- IEEE 802.3u 100Base-TX Fast Ethernet
- IEEE 802.3u 100Base-FX Fast Ethernet Fiber
- IEEE 802.3x Flow Control and Back-pressure
- IEEE 802.1p Class of Service (CoS)
- IEEE 802.1Q VLAN

#### Supported protocols

ITU-T V.28 to management

#### **Ethernet ports**

- 10/100/ Mbit/s transmission speed
- Flow control function
- "Autocrossover" MDI, MDI-X function
- Supports VLAN, IEEE 802.1q
- Proper connection signalling
- 3 x RJ-45 type connector

#### **Optical Ethernet ports**

- SM, MM, WDM, 1310nm, 1550nm,
- Fibre type 9/125um, 62,5 / 125um
- SC connector,
- OptoLock (POF)
- · Link Fault Pass Through

Ranges depending on the type of optical port 15km, 50km, 120km (1550nm), 20km WDM, 40km, 60km WDM

#### Management

- Only via CLI RS232 console port
- RS232: (9600,N,8,1)
- RJ45 connectors

#### Casing

- Dimensions 103x77x53mm
- Weight up to 0,3 kg
- Tightness IP30
- Suitable for mounting on DIN TH-35 rail

#### **Environmental requirements**

- Ambient temperature 0°C to +50°C
- Industrial version (T): -40°C to +70°C
- Relative air humidity 80% in temperature +20°C

#### **Power supply**

- Range of power supply voltages 12 ÷ 60V DC
- External 230V AC / 48V DC power adapter
- Up to 3W power consumption
- · screw connections



Code

# METIS-S-(X)-(P)-(T)

Working temperature option:

**none** - range 0°C to +50°C **T** - range -40°C to +75°C

#### **Protection function:**

None - without protection

P - Protected version

#### Optional field, only if WDM is chosen in the preceding field:

- 1 1310/1550 nm for version WS/WM/WL or 1550/1570 nm for version WLL
- 2 1550/1310 nm for version WS/WM/WL or 1570/1550 nm for version WLL
- **3** protection 1310/1550 and 1550/1310 nm for version WS/WM/WL or 1550/1570 and 1570/1550 nm for version WLL

#### Interface types:

Built only a single interface speeds of 100 Mbps with SC/PC\*:

**MM** – 850 nm MM – range 2 km

**S** – 1310 nm SM/MM – range 20/5 km

**M** – 1310 nm SM – range 50 km

**L** – 1550 nm SM – range 100 km

• Interface WDM (necessary additional field (x) in an assay for the transceiver)

WS - 1310/1550 and 1550/1310 nm SM/MM - range 20/2\* km

**WM** – 1310/1550 and 1550/1310nm SM – range 40 km

**WL** – 1310/1550 and 1550/1310 nm SM – range 60 km

**WLL** – 1550/1570 and 1570/1550nm SM – range 100 km

\* - Range for MM fiber is indicative depending on actual fiber parameters

