SW3 DIN

Compact Switch for Secondary Substations

The **SW3** is a **Compact Switch** that fulfils all the required functions to set up a **reliable network** within a **Secondary Substation**

As a **level 2** switch, **SW3** brings the necessary capabilities to implement the automation of the Electrical Substations according to **IEC 61850** standard.

The **SW3** can be managed locally and remotely, through a local console, Telnet and SSH server, or through HTTP/HTTPS web server.

The SW3 supports the **SNMPv1**, **SNMPv2c** and **SNMPv3** management protocols, as well as other protocols and services such as **LLDP**, **LAG**, **GARP/GMRP, NTP/SNTP, TACACS+** and **RADIUS**.

Main Applications

Deployment of big scale LANs when the main requirements are: **port density**, **switching performance**, and **logical complexity**.

Equipment interfaces

- ✓ 1 service console (DCE mode).
- ✓ 2 front Gigabit Ethernet SFP bays.
- ✓ Up to 8 front Fast Ethernet ports
  (RJ-45 and/or MT-RJ or, upon request, LC or ST).

Main Facilities

Full Duplex Wired Speed switching core. Port speed automatic detection. STP (IEEE 802.1d) and RSTP (IEEE 802.1w). Multiple VLANs management (250 simultaneous) (IEEE 802.1Q). QoS (IEEE 8021p). Broadcast and Multicast traffic limitation. MAC address access control (IEEE 802.1X and local lists) and remote user authentication. Q-in-Q operation (double tagged). Link aggregation by LAG function (static). Port mirroring. Links in VLAN Native mode. Interoperability with IEDs that complies with IEC 61850.

Management System

- · HTTP/HTTPS web server.
- · SNMP v1, v2c, v3.
- · Telnet, VT100, SSH.
- · FTP/FTPs server.
- · Command Line Interface (CLI) console.
- · TLS 1.2.
- · RSA Key Management.
- · Authentication and Accounting - TACACS+ and RADIUS clients.

Additional Services

- · LLDP (IEEE 802.1AB).
- · LAG without LACP.
- · GARP/GMRP (IEEE 802.1Q).
- · IGMP.
- · NTP/SNTP.
- · PVLAN.
- · DHCP client.

Technical Information

L2 switching
- ✓ Non-blocking hardware architecture
- ✓ 11 Gbps switching capacity
- ✓ Maximum of 8192 MAC addresses

Fast Ethernet ports
Up to 8 ports resulting from:
- ✓ 8 ports type 10/100Base-Tx with RJ-45 connector (IEEE 802.3i/802.3u/IEEE 802.3x).
- ✓ 4 ports type 10/100Base-Tx with RJ-45 connector & 4 ports type 100Base-Fx MM (1300nm) with MT-RJ (IEEE 802.3u/IEEE 802.3x) connector or, upon request, LC or ST connector.

Gigabit Ethernet ports
- ✓ 2 SFP Gigabit Ethernet bays (IEEE 802.3z/802.3ab/802.3u/802.3x).

Service port
- ✓ DB9 female connector (DCE mode). Speed of 115200 bit/s

Mounting
DIN rail.
Dimensions: Height: 167 mm; Width: 51 mm; Depth: 116 mm.
Weight: 850 g

Power supply
10.5-72Vdc (48Vdc nominal) or multirange (36-360Vdc, 80-265Vac)
Maximum consumption at 48 Vdc: 12 W
Maximum consumption at 230 Vac: 22 W

Temperature range From -40° C to +85°C

Material   Grey (RAL 7024) zinc-plating iron

EMI Immunity & Environment Compliance
                IEC 61850-3, IEEE 1613, IEC 61000-6-5

ZIV Automation Headquarters
Parque Tecnológico de Bizkaia, 210 - 48170 Zamudio, Spain. Tel.: +34 944 522 003   Fax.: +34 944 522 140.   E-MAIL: ziv@zivautomation.com
Please visit our website for local information in your area   **www.zivautomation.com**