# SWMDL-H-4TGX-2USF SWMDL-H-6TGX

#### **Feature**

Manageable Layer 2 Hardened 6 Gigabit Ethernet switch

- SWDL-H-4TGX-2GSF 4 x 10/100/1000BaseT ports and 2 x SFP dual rate optical port 100FX/1000SX/LX
- SWDL-H-5TGX-GSF
   5 x 10/100/1000BaseT ports
   and 1 x SFP dual rate optical
   port 100FX/1000SX/LX
- SWDL-H-6TGX 6 x 10/100/1000BaseT ports
- Ring and tree protection: STP, RSTP and proprietary that support 36 SWMD-L devices with a Ring recovery time less 30ms
- VLAN: par port, 802.1q, Q-in -Q
- Metal box with DIN Rail and Wall fixing
- 12Vto 54Vdc dual input power supply with terminal block, low consumption 5.1Watt
- Working temperature –20 to +

# ETHERNET DISTRIBUTION IN INDUSTRIAL ENVIRONMENTS

The manageable switches SWMDL-H-xTGX-xUSF are use to deploy Ethernet or Gigabit Ethernet to 4 or 5 devices /RTU /Stations in hardened industrial environment. These industrial switches are compacts and hardened. They are supporting the -20°C to 75°C working temperature.

These industrial switches are enclosed in IP30 metal enclosure with DIR rail fixing. They have dual -12 to -54Vdc power supply input with a terminal block.

This series of 6 Giga Ethernet ports include 6 copper ports, 5 copper ports with 1 fiber ports, 4 copper ports with 2 fiber ports. The copper ports support 10/100/100BaseT automatic negotiate rate, half /full duplex and dual rate or universal fiber port that support 100FX SFP or 1000SX/LX/ZX SFP, or dual rate SFP.

CXR supply multimode or single-mode SFP-STM1 -xx for 100FX rate and SFP-GSX-MM or SFP-GLX-SMxx for 1000SX/GX and 100FX fiber interfaces. If the SFP-GSX/GLX are installed the fiber interface will select the faster rate according to the both end of the fiber. We supply standard fiber with two cores fiber at 850/1310/1550nm or WDM with single core at 1310/1550nm or 1310/1490nm and CWDM SFP for optical multiplexing.



The **SWMDL-H-xTGX-yUSF** series are layer 2 manageable over WAN, LAN, USBP ports or in Bluetooth with Android Smartphone interface. They are managed in Telnet/SSH with CLI command or text menu or web interfaces.

The ring protection is supported in STP or RSTP protocols or with proprietary layer 1 solution on uplink ports. Then the recovery of the data over a 36 devices ring is processed within 30ms.

The **SWMDL-H-xTGX-yUSF** series supports VLANs per port, tagged IEEE.802.1q VLAN and double VLAN tagging or Q-in-Q. La QoS is based on VLAN and DSCP with 4 priority queues.

This "Store and Forward" switches are transparent to 9K Jumbo frames.

They support IGMP snooping V1 and V2 for multicast applications,

The access to the local and uplink ports is under control of IEEE802.1x with Radius client base on external Radius client.



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#### SWMDL-H-xTGX-xUSF

# **SPÉCIFICATIONS**

## SWMDL-H-4TGX-2USF

- 4 x 10/100/1000Base-TX with RJ45
- 2 SFP for 100FX or 1000SX/LX SFP SWMDL-H-5TGX-USF
- 5 x 10/100/1000Base-TX with RJ45
- 1 SFP for 100FX or 1000SX/LX SFP SWMDL-H-6TGX
- 6 x 10/100/1000Base-TX with RJ45

#### Fiber Interfaces:

Slot SFP support 100FX or 1000SX/LX or dual rate 100FX and 1000SX/LX SFP-STM1-MM/SMxx for 100FX only SFP-GSX-MM for 100FX MM and 1000GSX SFP-GSX-SM.. for 100FX SM and 1000GLX Work with standard dual core, WDM single core and CWDM CXR SFP modules

# Other ports

- Console RS232 port: RJ45
- USB 2.0 ports for load and management
- Bluetooth V2.1 ports for administration with Android Smartphone. (on/off)

#### Standards

IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX/FX IEEE 802.3ab 1000Base-T IEEE 802.3z 1000Base-x (fiber)

IEEE 802.3x Flow Control IEEE 802.1q VLAN tag IEEE 802.1p Priority IEEE 802.1ab LLDP

IEEE 802.1d/1w STP/RSTP IEEE 802.1x Client Radius

#### Layer 2 switch

VLAN single and double tagging and Q-in-Q, QoS based on VLAN, DSCP and P-Bit with 4 queues of priority.

IGMP snooping v1/v2
Bandwidth per port
Broadcast storm control

Port mirroring Loop detection

## **Hardware Specifications:**

Auto-Negotiation of copper and fiber ports

MDI/MDIX Auto-selection

2K MAC addressee table

128Koctet buffer

MTU of Jumbo frames support 9KBytes

Flow Control

Store and Forward switch mechanism

4K of VLAN ID support

Throughput: wire-speed 1,488,000bps

### Ring redundancy:

STP/RSTP,

Ring Fast recovery <30ms for 36 nodes

## Management

Telnet or SSH for CLI and text menu

Web http SNMP v1/v2c

DHCP client and auto provisioning

FTP/TFTP NTP client

Power down trap

Management Bluetooth with Android Smartphone and free software

# Security:

SSH

Authentification with Radius client for port access and management.

#### LEDs:

Power, FDX, Status, Speed, F/O Link/Act, TX Link/Act, POE

#### **Environment**

Working:  $-20^{\circ} \sim 75^{\circ}C$ Stocking  $-20^{\circ} \sim 85^{\circ}C$ 

Humidity 5% ~ 90%, non-condensed

### Case/Dimension/weight

IP30 metal case supply with DIN rail fixing  $127 \times 112 \times 75$  mm (H x P x L)

Weight 1. 005Kg

## Power supply

12 to 54Vdc per terminal block with dual input. DC Power consumption 5.1W AC/DC optional module: Industrial or Hardened, DIN-rail or standard...

Compliance



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# **MODELS**

SWMDL-H-4TGX-2USF	Layer2 manageable DIN-Rail switch, hardened -20 to +75°C working temperature, 4 x 10/100/1000BaseT ports, 2 universal SFP 100FX/GSX/GLX SFP port w/o SFP, VLAN tagging 802.1q, Q-in-Q, ,QoS 802.1p, truncking, RSTP, SNMP V2c, redundant input power terminal bloc 12-54Vcc. Management over USB, LAN and Bluetooth.
SWMDL-H-5TGX-USF	Layer2 manageable DIN-Rail switch, hardened -20 to +75°C working temperature, 5 x 10/100/1000BaseT ports, 1 universal SFP 100FX/GSX/GLX SFP port w/o SFP, VLAN tagging 802.1q, Q-in-Q, ,QoS 802.1p, trunking, RSTP, SNMP V2c, redundant input power terminal bloc 12-54Vcc. Management over USB, LAN and Bluetooth.
SWMDL-H-6TGX	Layer2 manageable DIN-Rail switch, hardened -20 to +75°C working temperature, 6 x 10/100/1000BaseT ports, VLAN tagging 802.1q, Q-in-Q, ,QoS 802.1p, trunking, RSTP, SNMP V2c, redundant input power terminal bloc 47-54Vcc. Management over USB, LAN and Bluetooth.
PS-DIN-12V-40W	AC/DC DIN rail power 40W, 85/264Vac, output on terminal block 12V 0 to 3,33A , L x H x D =40x90x100
PS-DIN-24V-30W	AC/DC DIN rail power 30W, input 85 to 264Vac, output on terminal block 24V 0 to 1,5A, L x H x D =78x93x56
ACDC-48V-35W	AC to DC 48V 35W adapter for MD, FO, CV, TS, CIP delivered in 48V
ACDC-H-48V-60W-DP	AC/DC 88-264Vac to 48V 5.0A 60W power supply, hardened -20 to +70°C or 36W at 70°C, terminal block, plastic DIN rail case, LxDxH 40x90x100mm