VL Vi-Link
Fiber Optic Communications

Network Equipment Series

Model   IM28

Product Description

The IM28 is an Industrial Managed Gigabit Ethernet Switch. It has 2* 1000 Mbps fiber optic SFP ports and 8* 10/100/1000 Mbps electrical ports. The IM28 is designed to meet the various industrial application needs and provide a wide range of industrial Ethernet network communication solutions, including linking multiple remote traffic intersections to the Traffic Operation Center.

The IM28 also features powerful Web-based, CLI management capabilities, a wide input range dual power supply and its support for DIN rail and panel mounting for installation in the industrial environment.

Applications include ITS Intelligent Traffic Control System, Homeland Security, Metro & Railroad Systems, Oil & Gas Monitoring System, Utility Management, Premise Networks, Military Hardened applications or anything requiring high quality Data Transmission performance

Features

- 8* 10/100/1000Mbps Auto-sensing RJ45 ports
- 2* 1000Mbps SFP fiber ports, 40 Km @ Single Mode
- 8 KV Ethernet surge protection, adapt to a harsh outdoor environment
- Support Auto MDI/MDIX
- Flow control mode: full duplex with IEEE 802.3x standard, half-duplex with Back pressure standard
- IEEE 802.3 10Base-T and IEEE 802.3u 1000Base-TX compliant
- A store-and-forward switching mechanism
- Operating environment temperature: -40 ° ~85 °c
- Intelligent power consumption detection and classification
- SW-Ring ring network patent technology (Fault recovery time<20ms)
- IGMP Snooping, GMRP and static IGMP
- VLAN, PVLAN, Port trunking, rate control, control broadcast domain
- IEEE802.1p_QOS
- SNMP, Telnet, WEB
- SSH, SSL, ACL, automatic MAC address bounding
- IEEE 802.1d(STP), IEEE 802.1w(RSTP), IEEE 802.1s(MSTP)
- Alarming: support ARP listening, power down, and ring-alarm
- Jumbo frames support up to 16kb
- Support link monitoring, Support port mirroring

Applications

- *ITS Traffic Applications*
- *SCADA Networks*
- *Metro Networks*
- *Gas & Oil Fields Monitoring Applications*
- *Railroad Networks*
- *Military Applications*
- *Data Acquisition Applications*

Ordering Information

Model	Descriptions
IM28LC03	Managed Ethernet Switch, 2* 1000M LC SFP, SM 1310nm, 50 Km, 8* 10/100/1000M-TX RJ45 , +5 VDC *** Replace LC with SC for SC Connector***

Network TV Equipment Series
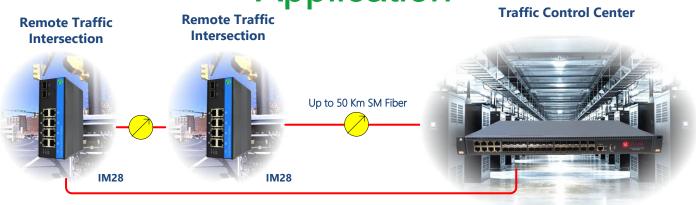
Model IM28

System:

Error Rate	1 in 10^{12} or Better
Network Standard	IEEE 802.3 100BASE-T IEEE 802.3u 1000BASE-TX IEEE 802.3z FX IEEE 802.3x Flow Control IEEE 802.3ad Port trunk with LACP IEEE 802.3w RSTP IEEE 802.1Q VLAN Tagging
Indicators	PWR, TP, FO, 100M
Ports	8* 10/100/1000Base-T 2* 1000Base- LX
Frame Flow Control	Full Duplex Mode
Frame size	16K Bytes
Jumbo Frame	9000 Bytes
Layer 2 Management	Store-and Forward Remote Monitoring (RMON) Far-end Fault Indication (FEFI) Link Fault Pass Through (LFP) Auto Recovery Remote Management and Set Up Manual IP Address Setting / DHCP Loopback, Broadcast, Multicast, Unicast storm control Speed Duplex Mode Configuration Bandwidth Control on TP/FX

Physical:

Dimension	5" x 8" x 1.4"
Power	+5 VDC @1 Amp

Fiber Interface:

Port	2* 1000Base-LX
Data Rate	1000 Mbps
Connector	LC
Distances	10KM@1310MM, 50KM@1310SM

TX Interface:

TX Port	8* 10/100/1000Base-TX Auto-Negotiation MDI/MDIX
Data Rate	10/100/1000 Mbps
Connector	RJ45
Transmission Mode	Half/Full Duplex

Network Management :

Interface	Web Browser, SNMPv1, v2c Monitor
Port Configuration	Port enable, Auto-Negotiation, Full and Half Duplex mode, Flow Control Enable, Bandwidth Control
VLAN	16 IEEE 802.1Q VLAN / Q-in-Q VLAN
Link Aggregation	Supports IEEE 802.3ad LACP
QoS	802.1p Priority, DSCP field in IP
IGMP Snooping	IGMP (v1/v2) Snooping, up to 64 Multicast groups
SNMP MIBs	RFC-1213 MIB-2, RFC-1573 MIB RFC-2819 RMON MIB (Group 1)

Environment:

Operating	-34^0 C to $+74^0$C
Storage	-40^0C to $+95^0$C
Humidity	98% Non-Condensing

Application

Remote Traffic Intersection

Remote Traffic Intersection

Traffic Control Center

Up to 50 Km SM Fiber

IM28

IM28

EN2440

**Typical IM28 Ethernet Switch
In Traffic Monitoring Redundant Configuration**