Industrial Gigabit Ethernet Switch 10-Port L2+ Managed

IGM-1081

H/W Version: 1

LevelOne IGM-1081 is full Gigabit Ethernet switches, providing 10 Gigabit Ethernet ports to update the existing network to a full gigabit speed infrastructure. A full Gigabit network provides higher overall throughput than a legacy Fast Ethernet network, and reduce the response time for timing sensitive applications that may mix of video, voice and data in its traffic pipe. With the powerful features, IGM-1081 managed switch is easily to prioritize, partition and organize user's network and provide reliable and good quality services.

Key Features

- Provide 8 Gigabit Copper ports plus 2 SFP ports 1000BaseF (SX/LX/LH)
- 9K Jumbo frames
- L2 wire-speed switching engine
- 8K MAC forwarding addresses
- Network redundant LACP, Spanning tree STP, RSTP & MSTP, and quick Ring fail-over protection (< 20 ms)
- Port-based /tag-based VLAN, IEEE 802.1ad/QinQ VLAN, Add/remove VLAN tags,
- Multicasting support IGMP v1/v2, proxy & snooping
- Multicast/Broadcast/Flooding Storm Control
- IEEE802.1x access control
- Per VLAN mirroring
- Dual power input (12~58 VDC) & Reverse power protection
- DIN-Rail and Wall mounting option

Technical Specification

Ethernet	
Operating mode	Store and forward, L2 wire-speed/non-blocking switching engine
MAC addresses	8K
Jumbo frames	9K Bytes
Copper RJ45 Ports	
Speed	10/100/1000 Mbps
MDI/MDIX Auto-crossove	Support straight or cross wired cables
Auto-negotiating	8 x 10/100/1000 Mbps speed auto-negotiation Full and half duplex
Ethernet isolation	1500 VRMS 1 minute
SFP (pluggable) Ports	
Port types supported	2 x SFP (pluggable) Ports 100/1000BaseSFP slot Support 100FX Support 100/1000BaseT SFP transceiver
Fiber port connector	LC typically for fiber (depends on module)
Optimal fiber cable	Typical 50 or 62.5/125 μm for multimode (mm) Typical 8 or 9/125 μm for single mode (sm)
Network Redundancy	
Fast failover protection rings	Link loss recovery < 20ms; Single & Multiple rings supported
Spanning Tree Protocol	IEEE 802.1D STP, IEEE 802.1w RSTP, IEEE 802.1s MSTP
Port Trunk with LACP	Static trunk or Dynamic via LACP (Link Aggregation Control Protocol)
Bridge, VLANs & Protocols	
Flow control	IEEE 802.3x (Full Duplex) and Back-Pressure(Half Duplex)
Max VLANs	256
VLAN Types	Port-based VLANs IEEE 802.1Q tag-based VLANs IEEE 802.1ad Double Tagging (Q in Q)
Multicast protocols	IGMP v1, v2 with up to 255 multicast groups IGMP snooping and querying Immediate leave and leave proxy Throttling and filtering
LLDP	IEEE 802.1ab Link layer Discovery Protocol (LLDP)
Traffic management & QoS	
Priority	IEEE 802.1p QoS
Number of queues per port	8
Scheduling schemes	SPQ, WRR
Traffic Shaper	port-based shaping
Security	
Port security	IP and MAC-based access control IEEE 802.1X authentication Network Access Control
Storm Control	Multicast/Broadcast/Flooding Storm Control
Management	
User Management interfaces	Cisco-like CLI (command line interface) WEB-based Management SNMP v1, v2c Telnet (5 sessions)
Management Security	HTTPs, SSH Radius Client for Management
Upgrade & Restore	TFTP/FTP for Configuration Import/Export, TFTP/FTP for Firmware Upgrade
Diagnostic	yslog Per VLAN mirroring Ethernet Copper connection diagnostic too SFP with DDM (Digital Diagnostic Monitoring)
MIBs	RFC 1757 RMON 1,2,3,9; RFC 2674 Q-Bridge MIB; RFC-1213 MIB-II; RFC-1493 Bridge MIB; RFC 2233 IF MIB
DHCP	Client, Server, Relay, Snooping, Option 82
NTP/SNTP	Yes
System status	Device info/status; Ethernet port status; PoE status
PoE management	Scheduling; power control; PoE PD power consumption
Power	
Power input	Redundant Input Terminals
Input voltage range	12-58 VDC
Reverse power protection	Yes
Transient protection Power consumption	> 15,000 watts peak
Indicators	
Power Status indication	Indication of power input status
Ethernet port indication	Link & Speed
Environmental & Compliances	
Operating temperature range	-40 to +75°C (cold startup at -40°C)
Storage temperature range	-40 to +85 °C
Humidity (non-condensing)	5 to 95% RH
Vibration, shock & freefall	IEC68-2-6, -27, -32
Certification compliance	CE/FCC/UL-508;
Electrical safety	UL508/CSA C22, EN61010-1, CE
EMC	FCC Part 15, CISPR 22 (EN55022) Class A IEC61000-4-2, -3, -4, -5, -6 (Level 3)
RoHS and WEEE	RoHS (Pb free) and WEEE compliant
MTBF	> 25 years
Mechanical	
Ingress protection	IP30
Installation option	DIN-Rail mounting, Wall mounting

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