

IGS-M1648CE Industrial Managed Switch

LCSI



28-Port: 16 x Gigabit Ethernet ports, 8 x RJ45/SFP Combo Ports and 4 x Gigabit SFP Slot

Features

■ System Interface/Performance

- 16 x 10/100/1000T(x), auto negotiation speed duplex mode, auto MDI/MDI-X
- 8 x RJ45/SFP Combo + 4 x Giga SFP Slots
- Store-and-Forward Switching Architecture
- 12Mbits Packet Buffer
- 16K MAC Address Table
- 16K Jumbo Frame
- Priority Queues : 8
- VLAN Table Size : 4094
- IGMP Group : 1023
- Switching Capacity: 56 Gbps
- Forwarding Rate: 41.66Mpps
- DI (Digital Input) & DO (Digital Output)
- 1 x Console Port for CLI Management

■ Features

- RSTP, MSTP, ERPSv2, LACP for Network Redundancy
- QoS CoS/DSCP to increase determinism
- Supports IGMP Snooping v1/v2/V3, up to 1023 groups
- DHCP Relay Option 82 for policies IP address assignment
- SNMP v1/v2c/v3 for network management
- Supports Storm Protection
- 1x USB 2.0 storage for firmware update, configuration backup, restore, boot up and system log
- Support industrial automation protocol Modbus TCP

Standard

IEEE Standard	IEEE 802.3 10BaseT IEEE 802.3u 100BaseTX IEEE 802.3ab 1000BaseT IEEE 802.3z 1000BaseX IEEE 802.3x Flow Control IEEE 802.3ad/802.1AX LACP IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid STP IEEE 802.1s Multiple STP ITU-T G.8032 / Y.1344 ERPS IEEE 802.1Q VLAN Tagging IEEE 802.1ad Stacked VLANs IEEE 802.1p Class of Service IEEE 802.1X Network Authentication IEEE 802.1AB LLDP
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Software Features

Network Redundancy	RSTP, MSTP, G.8032 ERPSv2, Port Trunking with LACP
Security Features	802.1X, RADIUS, TACACS+, SSL, SSH
Management	IPv4, IPv6, Web, Telnet, Serial Console, CLI, SNMP v1/v2c/v3, uPnP
Diagnostics	RMON, SNMP Inform/Trap, Syslog, SMTP, Port Mirroring, LLDP
Configuration	DHCP Server/Client, Relay Option 82, TFTP, USB
Filter	802.1Q VLAN, Q-in-Q, IGMP Snooping v1/v2/v3, IGMP Querier, Independent Vlan Learning
Time Sync.	NTP
QoS	CoS, DSCP, WRR/SPQ Queuing, Storm Protection
Industrial Profiles	Ethernet/IP, Modbus TCP

Interface

RJ45 Ports	16 x 10/100/1000T(x), auto negotiation speed duplex mode, auto MDI/MDI-X
SFP/Fixed Fiber Port	8 x RJ45/SFP Combo Ports and 4 x Gigabit SFP Slot

LED Indicators	Per unit: PWR1, PWR2, Fault, Ring Master, Ring State Ports: Link/Active with highest speed(Green), low speed(Amber)
Alarm Contact	1x relay output with current carrying capacity of 1A @ 24 VDC
Button	Multiple functions reset button
Serial Console	1x RS232 in RJ45 connector with console cable, 115.2Kbps, 8N1
Digital Input	1x isolated input from the electronics. +13 to +30V for state "1", -30 to +3V for state "0". Max. input current: 8mA
Serial Console	1x RS232 in RJ45 connector with console cable, 115.2Kbps, 8N1
Storage	1x USB 2.0 storage for firmware update, configuration backup, restore, boot up and syslog

Power

Input Voltage	12~48VDC or 90~264VAC, redundant dual inputs by 2*DC, DC+AC, 2*AC
Power Connection	AC socket and DC 4-pin terminal block(2*DC)
Power Consumption	30 Watts
Protection	Overload Current Protected, Reverse Polarity Protected

Mechanical

Housing	Aluminum, IP30 protection
Protection Class	IP30
Dimensions	440 x 44 x 331 mm (H*W*D)
Weight	4.8 kg
Mounting	Rackmount
Digital Input	1x isolated input from the electronics. +13 to +30V for state "1", -30 to +3V for state "0". Max. input current: 8mA

Protection

Overload Current Protection	Present
Power Reverse Polarity Protection	Present

Environment

Operating Temperature	-40°C to 75°C models
Storage Temperature	-40°C ~ 85°C
Ambient Relative Humidity	5 to 95%, (non-condensing)

Regulatory

EMI	FCC Part 15 Subpart B Class A CE EN 55022 Class A
EMS	IEC61000-4-2 (ESD Level 4), IEC61000-4-3 (RS Level 3), IEC61000-4-4 (EFT Level 4) IEC61000-4-5 (Surge Level 4), IEC61000-4-6 (CS Level 3), IEC61000-4-8 (Magnetic Field Level 4)
Free Fall	IEC60068-2-32
Shock	IEC60068-2-27
Vibration	IEC60068-2-6
Green	RoHS Compliant
MTBF	>100,000 hours

Order Information

Product Name	Description
IGS-M1648CE-DD	Industrial L2 Managed Ethernet Switch: 28-Port: 16 x Gigabit Ethernet ports, 8 x RJ45/SFP Combo Ports and 4 x Gigabit SFP Slot 2*DC(12~48V) Power Input
IGS-M1648CE-AA	Industrial L2 Managed Ethernet Switch: 28-Port: 16 x Gigabit Ethernet ports, 8 x RJ45/SFP Combo Ports and 4 x Gigabit SFP Slot 2*AC(90~264VAC) Power Input
IGS-M1648CE-DA	Industrial L2 Managed Ethernet Switch: 28-Port: 16 x Gigabit Ethernet ports, 8 x RJ45/SFP Combo Ports and 4 x Gigabit SFP Slot 1*VDC(12~48V) and 1*AC(90~264VAC) Power Input

Note: In a continuing effort of improvement and update, product specifications are subject to change without prior notice.

Dimension (Unit = mm)

