

Industrial Ethernet Switches

IFE 16T-4GB-MC



Key Features

- 4 x Gigabit SFP ports, 16 x 10/100Mbps
- 'C-Ring' Self-Healing recovery time (<20ms) and RSTP/STP network redundancy
- SNMPv3, IEEE 802.1X, HTTPS, and SSH to enhance network
- Management via web browser, CLI, Telnet /serial console, SNMP
- Operating temperature -40 to +75°C
- IEC 61850 & IEEE 1613 approved for electricity sub-station use
- Redundant power inputs
- IP40 Housing



Physical Parameters

- RJ 45 Ports support MDI / MDI-X
- 4 x 1000 SFP Ports
- 16 x 10/100Tx ports
- Store and Forward architecture
- Backplane 11.2Gbps – 8.33Mpps
- 2 Mbit Packet Buffer
- MAC Table size – 8K
- Operating temperature -40C ~ +75C
- Protection: IP 30 metal housing
- Humidity 5% ~ 95% non-condensing
- Alarm relay

Power Supply

- 24 vdc (18vdc ~ 36vdc) dual redundant PSU's
- Overload current protection
- Reverse polarity protection
- Current consumption – 0.55amps at 24vdc
- Connector: 6 contact terminal block

Flow control

- IEEE 802.3x Flow control, back pressure

Bandwidth Management

- Select Ingress and Egress bandwidth

IGMP V1 / V2 Snooping for multicast traffic

- 256 IGMP Groups

VLAN

- IEEE 802.1Q VLAN Tagging up to 256 Groups
- VLAN ID Range 1 to 4096
- GVRP to ease network planning

Port Trunking with LACP IEEE 802.3ad

SNTP Client or Server

Resilience

- Resilient "Ring", selfheal < 20 ms (256 switches)
- STP 802.1d, RSTP 802.1w, MSTP

Security

- RADIUS Server Support
- IEEE 802.1x EAPoL Authentication
- VLAN
- MAC Authentication
- Port locking to block unauthorised access
- Access Control Lists
- DHCP Server

Broadcast Storm Control

- Multiple Broadcast / Multicast / DLF

Link Layer Discovery Protocol (802.1ad)

Management

- SNMP V1 / V2 / V3
- Web based – HTTPS
- CLI / Telnet / Serial SSH
- RMON Groups 1,2,3 & 9
- MIB II, Ethernet Like MIB, P-Bridge MIB,
- Q-Bridge MIB, Bridge MIB, RSTP MIB
- Automatic alarm through E.Mail, Alarm relays
- Port Mirroring – RX, TX, both
- TFTP Configuration back up & restore
- Ping Diagnostics

Quality of Service

- IEEE 802.1p Class of Service (MAC Layer)
- ToS / Diffserve enable or disable
- Port based priority 0 to 7
- 4 Priority queues per port
- WRR and Strict Priority
- Mapping priority to local precedence

LLDP Network Discovery

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FACT SHEET

Standards

- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3ab
- IEEE 802.1D-2004 for STP
- IEEE 802.1w Rapid Spanning Tree
- IEEE 802.1Q VLAN Tagging
- IEEE 802.1p Class of Service
- IEEE 802.1x for authentication
- IEEE 802.3ad Port Trunking with LACP
- IEEE 802.3x for flow control

Housing

- Metal with IP 40 protection
- Dimensions 60.2 x 115.5 x 138.5mm
- Weight 760 gms
- Operating temperature -40C ~ +75C
- Storage Temperature: -40C ~ 85C

Specifications

Certifications

- Safety: UL 60950-1
- EMI: FCC Part 15 sub part B Class A
- EN 55022 Class A

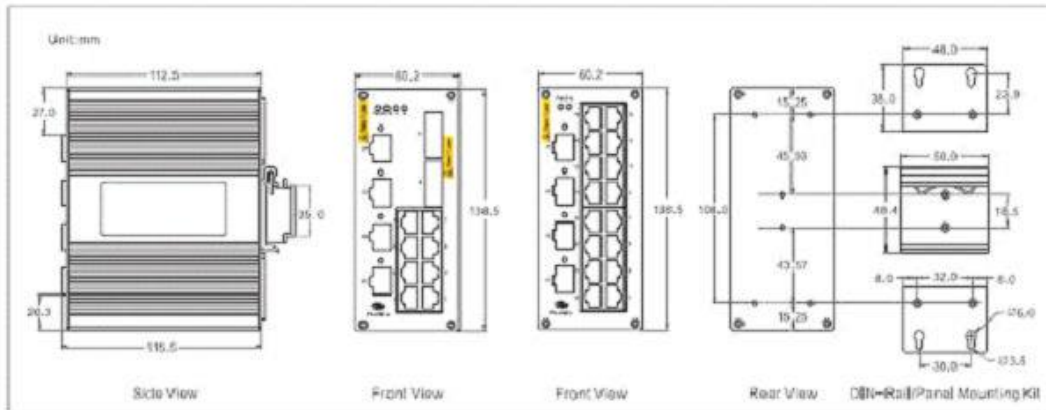
EMS

- EN 61000-4-2 (ESD) Level 3
- EN 61000-4-3 (RS) Level 3
- EN 61000-4-4 (EFT) Level 3
- EN 61000-4-5 (Surge) Level 3
- EN 61000-4-6 (CS) Level 3
- EN 61000-4-8 Level 3

- Shock : IEC 60068-2-27
- Freefall: IEC 60068-2-32
- Vibration: IEC 60068-2-6

Electricity Sub Station

- IEC 61850-3
- IEEE 1613



Ordering Information

IFE 16T-4GB-MC

Industrial Ethernet Switch 16 x 10/100 & 4 Gigabit SFP ports, Ring Technology