TECHAYA

RUGGED ENVIRONMENT SOLUTIONS

8,12 OR 16 x 10/100BASE-TX POE WITH UP TO 2 x GIGABIT COMBO PORTS, OR 100FX PORTS

ICE8016-POE

The *ICE8016* - Next Generation PoE, SNMP managed switch series. It's the most flexible switch in the market today offering 10/100Base TX ports with combination of gigabit ports and 1000FX ports. It designed for working under harsh environment and complies with all new standards of SSH, SNMP V3, eRSTP (for <15ms ring recovery). ICE8016 is capable of working in environment of -40°C to +85°C.

The **ICE8016** next generation managed switch supports web, telnet, CLI, SNMP V1, 2c, 3, based management and advanced features such as IGMP V2, IGMP V3, 802.1Q VLAN tagging, 802.1D spanning tree, 802.1S Rapid Spanning Tree, 802.1w Multiple spanning Tree and eRSTP for low latency recovery time, 802.1x security and many more. The advanced management features together with the rugged environment capabilities make the **ICE8016** switch a powerful solution for out-door installation combined with daisy chain and ring topology networks usually deployed for security surveillance and monitoring applications.

Key Features

- 8, 12, 16 Port of 10/100Base-TX all with PoE (PSE – IEEE802.3af)
- Up to 2 x Gigabit Combo ports (10/100/1000TX and 1000FX (SX,LX, ZX, WDM).
- Up to 4 x 100FX ports MM or SM.
- PoE control and scheduling mechanisims.
- Rugged, hardened IP30 case with Vibration/Shock resists.
- Max switching capacity: 68G non-blocking at wire speed
- Supports management via WEB, Telnet and RS-232, SNMP V1/V2c/V3, RMON
- Security: Port Security, SSH, HTTPS, 802.1x, RADIUS, per port MAC locking

- Link Aggregation 802.3ad LACP (up to 8 ports), MAC-Based trunking with auto fail-over
- Spanning Tree: 802.3d, 802.3w (Rapid), 802.3s (Multiple), eRSTP (<15ms) with Ring Coupling
- VLAN: 802.1Q, Port Based, Private VLAN, GVRP
- QoS: 802.1p, WRR, Strict Priority, IP TOS/COS/DSCP, TCP/UDP Port Based, Diffserve, Ingress/Egress rate limiting, 8 priority queues per port
- IGMP Snooping V1/V2/V3, Port Mirroring
- Redundant power supply 48VDC with alarm relay output

Specifications

Performance
Switch Fabric	68 Gbps
MAC Address	8K
Throughput	71.43 Mpps
Buffer Size	2 MB
Frame Size	Support Jumbo Frame up to 9KB

Management
Console	DB-9 RS-232
Management	CLI, Telnet, SSH, WEB, HTTPS, TFTP, XMODEM
Features	BOOTP, DHCP, Remote PING
Time Protocol	SNTP, NTP (RFC2030)
Protocols	SNMP V1/2c/3, RMON (4 Groups), MIB

Network Standards Compliance
IEEE 802.3, IEEE 802.3u, IEEE 802.3z, IEEE 802.3x
IEEE 802.1d, IEEE 802.1p, IEEE 802.1q, IEEE 802.3af
IEEE 802.3ad IEEE 802.1x, IEEE 802.1s, IEEE 802.1w

Physical Specification
Power Supply	Redundant 48VDC (47~55VDC) Terminal Block
Operating Temperature	-40°C ~85°C
Storage Temperature	-45°C ~90°C
Humidity	0%~95% non-condensing, Option for Conformal Coating
Dimension	W440mm x D205mm x H44mm
	Standard 19"rack-mount size, one-unit-height
Net Weight	3.2kg
Emission Compliance	UL508, EN61000-6-4, FCC Part 15 Class A,
	NEMA TS1/2, CE & FCC & UL 60950, EN055022
	EN61000-3-2, EN61000-3-3, EN61000-6-2
	EN61000-4-2, EN61000-4-3, EN61000-4-4
	EN61000-4-5, EN61000-4-6, EN61000-4-8
Shock and Vibrations	IEC60068-2-6, IEC60068-2-27, IEC60068-2-32

Ordering Information

Advanced Rugged Gigabit PoE Ethernet Switch

ICE8016	16 x 10/100TX PoE Managed Rugged Switch
ICE8012	12 x 10/100TX PoE Managed Rugged Switch
ICE8008	8 x 10/100TX PoE Managed Rugged Switch
ICE8116/XX	16 x 10/100TX + 1 x Combo Port 10/100/1000 / 1000FX Gigabit PoE Managed Rugged Switch
ICE8112/XX	12 x 10/100TX + 1 x Combo Port 10/100/1000 / 1000FX Gigabit PoE Managed Rugged Switch
ICE8108/XX	8 x 10/100TX + 1 x Combo Port 10/100/1000 / 1000FX Gigabit PoE Managed Rugged Switch
ICE8216/XX	16 x 10/100TX + 2 x Combo Port 10/100/1000 / 1000FX Gigabit PoE Managed Rugged Switch
ICE8212/XX	12 x 10/100TX + 2 x Combo Port 10/100/1000 / 1000FX Gigabit PoE Managed Rugged Switch
ICE8208/XX	8 x 10/100TX + 2 x Combo Port 10/100/1000 / 1000FX Gigabit PoE Managed Rugged Switch

Gigabit Options (XX)

SX	.... Combo Port 10/100/1000 + 1000SX Gigabit
LX	.... Combo Port 10/100/1000 + 1000LX Gigabit SFP1000LX (10Km)
LX20	.... Combo Port 10/100/1000 + 1000LX Gigabit SFP1000LX (20Km)
WDMA	. Combo Port 10/100/1000 + 1000LX Gigabit SFP1000WDM, Type A (10Km)
WDMA	. Combo Port 10/100/1000 + 1000LX Gigabit SFP1000WDM, Type B (10Km)

- **Optional also with up to 4 x 100-FX (MM, SM, WDM)**