



# IgniteNet FusionSwitch™ PoE

## FNS-PoE-10

### 10-Port L2 Gigabit Ethernet PoE Switch



## Product Overview

The IgniteNet FusionSwitch™ FNS-PoE-10 is a cost-effective L2 managed switch with eight Gigabit PoE ports and two 1G uplink ports. The FNS-PoE-10 is a full-PoE fanless design, it supports PoE on up to 8 ports at 15.4 W, or 4 ports at 30 W to meet the increasing power demands of users for IP cameras, IP telephones, or access points. With powerful software and hardware features, the FNS-PoE-10 is designed for SMB and enterprise markets and provides plenty of management options, including a console port.

## Key Features and Benefits

### Performance and Scalability

The FNS-PoE-10 is a web-smart switch designed for the SMB market. The switch can be deployed in different target network topologies, from small to large. The FNS-PoE-10 offers a complete PoE solution up to 125 W with powerful software and security features.

### Continuous Availability

IEEE 802.1w Rapid Spanning Tree Protocol provides a loop-free network and redundant links to the core network with rapid convergence, which ensures a faster recovery from failed links, enhancing overall network stability and reliability. IEEE 802.1Q VLAN-segmented broadcast domains reduce broadcast traffic and increase LAN security and performance. IEEE 802.3ad Link Aggregation Control Protocol (LACP) increases bandwidth by automatically aggregating several physical links together as a logical trunk and provides load balancing and fault tolerance for uplink connections.

### Multiple Management Options

The FNS-PoE-10 switch supports CLI, Web, SNMP v1/v2c/v3, and Telnet for multiple network management options. The switch supports a private MIB for detailed information. The switch also supports management functions through both IPv4 and IPv6.

### Comprehensive QoS

Eight egress queues per port enables differentiated management of up to eight traffic types. Traffic is prioritized according to 802.1p or DSCP, giving optimal performance to real-time applications such as voice and video.

Asymmetric bidirectional rate-limiting, per port or per traffic class, preserves network bandwidth and allows maximum control of network resources.

### Enhanced Security

Port Security allows access to a switch port based on MAC address. This limits the total number of devices from using a switch port and protects from MAC flooding attacks.

IEEE 802.1X port-based access control ensures all users are authorized before being granted access to the network. User authentication is carried out using a standards-based RADIUS server.

Access Control Lists (ACLs) restrict access to sensitive network resources by denying packets based on source and destination MAC addresses, IP addresses, and TCP/UDP ports. ACLs are hardware supported, so switching performance is not compromised.

Secure Shell (SSH) and Secure Sockets Layer (SSL/HTTPS) encrypts Telnet and web access to the switch, providing secure network management.

IP Source Guard can be enabled with DHCP snooping on trunk ports with a large number of VLANs to filter and control IP traffic access to the network.

DHCP snooping provides security by filtering un-trusted DHCP messages and by building and maintaining a DHCP snooping binding table.

Dynamic VLAN assignment for user authentication and location-independent access to the network.

### Smart Network Deployment

Automatic Voice VLAN for quick deployment of VoIP, and automatic Video VLAN to help deploy your IP-based surveillance system. Static routing helps you set simple routes for control of your network resources. IGMP and MLD snooping provide better multicast services.

### PoE Support

The FNS-PoE-10 provides up to 30 Watts of power to attached devices, such as VoIP phones, wireless access points, and surveillance cameras, all over existing Ethernet cables. The switch can deliver up to 30 Watts on 4 ports, or 15.4 Watts on 8 ports.



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Specifications		
<b>Port</b>	10/100/1000 RJ-45 PoE Ports	8
	SFP Gigabit Uplink Ports	2
	PoE Ports	8
	RJ-45 Console Port	1
<b>Performance</b>	Switching Capacity	20 Gbps
	Forwarding Rate	14.9 Mpps
	Flash Memory	32 MB
	DRAM	256 MB
	Packet Buffer	4.1 Mbit
	MAC Address Table Size	8 K
	Jumbo Frames	10 KB
	MTBF	2,196,413 hrs
	Heat Dissipation	545,933 Btu/H
	Acoustic Noise	0 dB (A)
	Surge Protection	Ethernet: ± 2 KV Power: ± 2 KV (line-earth), ± 1 KV (line-line)
<b>Mechanical</b>	Rack Space	13"
	Form Factor	Rackmount
	Dimension (W x D x H)	33 x 20.4 x 4.26 cm (12.9 x 8 x 1.67 in)
	Weight	2.4 kg (5.34 lb)
<b>PoE</b>	IEEE 802.3af/802.3at	√
	PoE Power Budget	0°C - 40°C / 125 W, 0°C - 45°C / 100 W
	PoE Timer	√
<b>Power Supply</b>	100-240 VAC, 50-60 Hz	√
	Max System Power Consumption (Watts)	160 W
<b>Environmental</b>	Operating Temperature	0°C to 45°C (32°F to 113°F)
	Storage Temperature	-40°C to 70°C (-40°F to 158°F)
	Operating Humidity (non-condensing)	10% to 90%
	Storage Humidity (non-condensing)	10% to 90%
	Altitude	3000 m
	Environmental Regulation compliance: WEEE	√
	Environmental Regulation compliance: RoHS	√

## Features

### L2 FEATURES

Spanning Tree Protocol:  
IEEE 802.1D Spanning Tree Protocol (STP)  
IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)  
IEEE 802.1s Multiple Rapid Spanning Tree Protocol (MSTP)  
Loopback Detection  
BDPU Filter/Guard  
BDPU Forward  
Root Guard

VLANs:  
Supports 4K IEEE 802.1Q VLANs  
Port-Based/MAC-Based/Protocol-Based VLANs  
Guest VLAN  
Auto Voice VLAN

Link Aggregation:  
Static Trunk  
IEEE 802.3ad Link Aggregation Control Protocol (LACP)

IGMP Snooping:  
IGMP v1/v2/v3 snooping  
IGMP Filtering/Throttling  
IGMP Queries  
IGMP Immediate leave  
MLD Snooping

LLDP/LLDP-MED

Green-Saving  
IEEE 802.3az  
Cable Length  
No Link Power-Saving

Jumbo Frame packet  
Cable Diagnostic  
Q-in-Q  
mDNS  
Ethernet Ring Protection Switching (ITU G.8032)  
IP clustering

### L3 FEATURES

Static Routing

### QoS FEATURES

Rate Limiting  
Priority Queues Schedule (WRR/Strict Priority/Hybrid QoS)  
Port-Based QoS  
IPv4/IPv6 DSCP  
DiffServ  
Auto VOIP  
Auto Video  
8 HW Queues per port  
Dynamic QoS

### IPv6

IPv4/IPv6 Dual Protocol Stack  
IPv6 Management  
IPv6 Ping/Trace  
IPv6 Telnet  
IPv6 Syslog  
IPv6 TFTP  
HTTP over IPv6  
SNMP over IPv6

### PoE

Support IEEE 802.3af (15.4 W)/IEEE 802.3at (30W) on each port  
Total PoE Power Budget: 125 W  
Dynamic Power Allocation  
Auto disable after exceeding power budget  
PoE Timer

### SECURITY

DDOS Protection  
CPU Guard (CPU Protection)  
Port Isolation  
Port Mirror (One to One, One to Many)  
Remote Mirror  
Storm Control  
Broadcast/Multicast/Unknown Storm Control  
IEEE 802.1X  
ACL  
Ingress Only  
L2/L3/L4  
ACL entry: 512  
IPv4/IPv6  
TCP/UDP-Based, MAC-Based ACL

Port Security  
MAC Filter  
MAC Authentication  
Port max count per port  
Dynamic VLAN Assignment  
Dynamic ARP Inspection  
AAA (RADIUS/TACACS+)  
IP Source Guard  
SSH v1.5/v2.0  
SSL v1/v2/v3  
SSL IPv4/IPv6  
SFlow (Trace on port - ingress only)  
Traffic segmentation  
Web Authentication



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## Features

### MANAGEMENT

- System password protection
- NTP/SNTP
- Dual Image/Configuration
- Configuration upload/download (HTTP/TFTP/FTP/SFTP)
- Firmware upload/download (HTTP/TFTP/FTP/SFTP)
- Auto Firmware Upgrade
- RMON (groups 1,2,3 and 9)
- SNMP
  - SNMP Trap
  - SNMP v1/v2/v3
  - SNMP Standard/Private MIB
- Management Access (Console/SNMP/Web /Telnet )
- Memory Flash Log
- Event/Error Log/Syslog
- DHCP v4/v6 Client//DHCP Snooping
- DHCP Snooping Option82
- Dynamic Provision (via Option 66,67)
- DHCP Relay v4 (v6)
- Port Mirroring (One to One) TX/RX (both)
- DNS Client without DNS proxy

### SAFETY

- CSA (CSA 22.2 NO 60950-1 & UL 60950-1)
- CB (IEC/EN60950-1)

### ELECTROMAGNETIC COMPATIBILITY

- CE Mark
- FCC Class A
- EN 55022 (CISRP 22) Class A
- EN 61000-3-2/3
- VCCI

### WARRANTY

- 2 year warranty

## Contact



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