

MEN-6412D

Managed Aggregation Ethernet Switch

4-port 100/1000 combo + 4-slot 100/1000 SFP +
4-slot Gigabit SFP

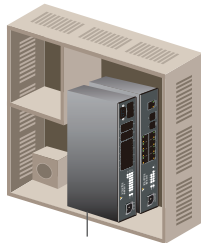


Description

Offering Gigabit Ethernet in Compactable design, MEN-6412D Managed Layer 2+ Aggregation switch is an industrial small form-factor fiber switch operating in wide range temperature from -20°C~60°C specifically designed for harsh outdoor deployments. The switch is best suitable to provide extended reach fiber connectivity for buildings, small-offices as well as mobile back-haul applications serving vast number of small cell deployments.

Built with 8-slot Gigabit SFP, MEN-6412D immediately uplinks to the aggregation switches via its fiber ports, which provide high-bandwidth uplinks over variable distances. Extensive software features of the switch deliver high-quality, reliable yet simple-to-use experience to its users. It can be deployed in different networking topology with various reliable and easy-to-monitor features. Compiling with flexible and modular design, the switch is perfect for low density subscriber base with high ARPU, delivering the most demanding Ethernet services efficiently and profitably.

Features Highlight



MEN-6412D

Robust Performance with Space-Conscious Design

Built in compact, fan-less and space-saving design to fit in confined spaces, the MEN-6412D can easily save your budget when deploying along with your existing access switch cabinet, preventing additional cables and cabinet installation costs, and avoiding unnecessary CAPEX.

Extensive Security Features

The MEN-6412D implements several defense mechanisms such as ACL, DHCP snooping, ARP, IEEE 802.1X and Port Security to deliver robust network security and enables service providers to offer more stable services on a more secure network.

Last-Mile Investment Protection

It is critically important for ISPs to protect their last-mile infrastructure from device thefts to avoid delays in delivering network services and loss of your investment. Focusing on this on-field hassle, the MEN-6412D is designed with Device Lock feature, a feature that locks your device to your network and will not function in any network. This innovative feature reduces device thefts and provides a continuous network connectivity saving your infrastructure investments.

Efficient Network Monitoring and Proactive Capability

MEN-6412D is configured with both SNMP v1/v2c/v3 and RMON features which give enhanced approaches for real-time traffic analysis, remote monitoring and management of individual switches, this avoids high OPEX with increase in efficiency and performance. The switch is assimilated with intelligent e-mail alarm system and SNMP Trap functionality to detect system abnormality along with faster troubleshooting. In addition to this, the device maintains a system log for the subsequent analysis of abnormal and unwanted flaws.

Redundant Ring for Faster Network Recovery

Even few seconds of missed communications due to link failure can cause inconvenience and recovering it becomes very critical. Considering these threats, the MEN-6412D is designed with various ring protocols like STP, RSTP, MSTP, Xpress Ring and ERPS where the network failure is recovered in time scale of milliseconds. This ensures non-stop transmission of real-time Ethernet data.

Comprehensive Traffic Prioritization

Network applications need different levels of services delivered to them reliably without any transmission delays and interruptions. The MEN-6412D has comprehensive QoS mechanisms that assign priority to applications and send only specific dedicated traffic to them. In addition, bandwidth management functions of the switch allocate greater bandwidth for mission-critical communications. With increased control, administrators can prevent unpredictable errors and utilize the bandwidth more effectively.

Specifications

Features

Layer 3 Routing	Network Management
Static Route	Local Console
Inter-VLAN Routing	Telnet and CLI
Enhanced Function	Web-based GUI
Hardware Monitor	SNMP v1/v2c/v3
ESD & Surge Protection	SNMP Trap, Syslog
Dying Gasp	eMail Alarm
Code Redundancy	RMON
ERPS (G.8032v2)	Port Mirroring
MLDv2	Firmware Upgradeable
IEEE 1588v2 (PTP)	Configuration Backup/Restore
Xpress Ring / Dual Xpress Ring	Port configuration, status, statistics
Dual Homing	User Security
IGMP Throttling	Port Isolation
Auto-Provisioning	Static MAC forwarding
DHCP option 66/67	Port Security with MAC limitation
PPPoE IA	ACL (L2/L3/L4)
UDLD	DHCP Snooping
Device Locking	802.1x authentication
Network Function	RADIUS/TACACS+ authentication
LACP Support/Static Link Trunking	HDoS, ARP Inspection
STP/RSTP/MSTP	Traffic Management and QoS
Loop Detection/Autorecovery timer	Tag-based VLAN/Port-based VLAN
Traffic Monitor/Autorecovery timer	Active VLAN Support 4K
VLAN Stacking (Q in Q)	8 Hardware Queues
GARP/GVRP	SP/WRR
MVR (Multicast VLAN Registration)	Storm Control
IPv6	Rate Limiting
Network Storm Protection	802.1p/DSCP/ToS Support
IGMP Snooping v1/v2/v3	Management VLAN
SFP DDMI support	
DHCP Relay/Option 82	
Protocol-based VLAN	
MAC-based VLAN	
Maximum Distances	
Copper	100 m
Console	15 m
SFP	Up to 110 Km
Performance	
Switch Fabric	24Gbps
MAC Table Size	16K
Max Jumbo Frame Size	10K

Standards

IEEE 802.3	10Base-T
IEEE 802.3u	100Base-TX/FX
IEEE 802.3ab	1000Base-T
IEEE 802.3z	1000Base-SX/LX
IEEE 802.3x	Flow Control
IEEE 802.3ad	Link Aggregation
IEEE 802.1d	STP
IEEE 802.1w	RSTP
IEEE 802.1s	MSTP
IEEE 802.1p	CoS Prioritization
IEEE 802.1q	VLAN Tagging
IEEE 802.1x	Port Authentication
IEEE 802.1ab	LLDP
IEEE 802.1ad	QinQ
IEEE 802.3	N-way Auto Negotiation
IEEE 802.3az	Energy Efficient Ethernet
IEEE 1588v2	PTP
ITU-T G.8032v1/v2	ERPS

Power

Redundant Power Input	48VDC dual power input
Power Consumption	TBD

Interface

Ports	4 x 10/100/1000Mbps PSE (RJ-45)
	8 x GbE SFP slots
	1 x RJ-45 Console

Mechanical and Environment

Mounting	Rack Mount
Operating Temperature	-20°C~60°C
Storage Temperature	-40°C~70°C
Operating Humidity	10 to 90% RH (non-condensing)
Storage Humidity	5 to 95% RH (non-condensing)
Weight	TBD
Dimensions (WxHxD)	268x44x128mm (105.5x17.3x50.4 inch)
LED Panel	POST, PWR1, PWR2, ALM, 1000, LNK/ACT

Ordering Information

MEN-6412	Managed 4-port 10/100/1000 PSE, 8-slot GbE SFP Aggregation Switch with 15V DC external power adapter
MEN-6412D	Managed 4-port 10/100/1000 PSE, 8-slot GbE SFP Aggregation Switch with dual 48VDC power input

*Specifications subject to change without notice.