

MEN-4110B

Managed Layer 2 Access Ethernet Switch

8-port 10/100Base-TX, 1-slot Gigabit,
1-slot 100FX/Gigabit SFP



Description

The MEN-4110B Managed Access switch is specifically designed to deliver a scalable and future-proof network solution for home and small businesses. The switch delivers maximum performance and reliability in one cost-effective equipment with its powerful chipset and much improved software features, thus allowing service providers to operate their networks more effectively and efficiently. Featuring 15V/2A DC Jack which easy to power on through AC/DC or Coaxial Power Adapter and functional with Battery Backup, the MEN-4110B enables service providers to deploy a safe, quick and convenient network.

Equipped with 8-10/100 Mbps downlinks and 1-GbE SFP plus 1-GbE Multi-rate (100/1000) SFP uplinks, the MEN-4110B allows services providers to offer flexible, high-value Ethernet services for low density subscriber base with medium ARPUs. Service providers can use 100Mbps uplink to begin with and shift to Gigabit uplinks by a simple change of SFP to fulfil their subscribers ever growing demands for high bandwidth. The MEN-4110B is an ideal combination of affordability and excellent switching capabilities to create an efficient network you need at relatively low cost.

Features Highlight

Convenient and Cost-effective Power Solution

Acting upon the increasing failure rate of switch power supplies due to exposure to power spikes and internal heat generation, the MEN-4110B is built with 15V/2A DC Jack and Battery Backup. While deploying on-site, DC Jack provides a convenient solution for installation of the switch through AC/DC or Coaxial Power Adapter, and in the event adapter failure, service providers can quickly and easily replace the faulty adapter without interrupting the network. Thus, eliminating a time consuming and costly RMA procedure of the switch.

Last-mile Investment Protection

To avoid delays in delivering network services and loss of your investment, it is critically important to ISPs to protect their last-mile infrastructure from device thefts. Focusing on this on-field hassle, the MEN-4110B is designed with Device Lock feature, a feature that locks your device to your network. By enabling Device Lock feature, the switch will not function in any network other than its configured network. This innovative feature of the MEN-4110B reduces device thefts and provides a continuous network connectivity saving your infrastructure investments.

Stable and Reliable Device Operations

A sudden power surge puts extra strain on the components of the switch, wearing it down over time and resulting in increased network down time. Built with increased level of surge protection, the MEN-4110B features surge protector function on each port and protects the ports and as well as device from surges entering through LAN cables. Thus, the MEN-4110B ensures stable and reliable device operations even in unstable power conditions, and prevents sudden network down time protecting your infrastructure investments and avoiding unnecessary operational expenditure.

Enhanced Control and Security

Built with enhanced defence mechanisms, the MEN-4110B delivers robust security. Port security limits only hosts using secure MAC addresses to communicate with the switch, while port isolation secures certain ports and prevents unnecessary inter-vlan communication between ports. Other security mechanisms such as DHCP snooping offers a convenient central management solution to uniquely identify, locate and manage the task of assigning IP addresses to every subscriber and ARP inspection provides users with validate access on a more secure network.

Comprehensive QoS Mechanisms to Assign Priority

Network applications need different levels of services delivered to them reliably without any transmission delays and interruptions. The MEN-4110B 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.

Efficient Network Monitoring and Management Tools

The MEN-4110B features SNMP, an industry standard management protocol, enables administrators to centrally manage and monitor the network, and easily but quickly identify issues that impact network performance. Supported by SNMP traps, the switch allows administrators to monitor unsolicited SNMP trap messages and maintain a helpful network status data for managing a healthy network. And in the event of network malfunction, Email alarm feature of the switch sends email alerts to notify administrator regarding real time network problems. These efficient features speed up and simplify network monitoring and troubleshooting, reducing operational head burden.

Features Highlight

Fine-grained Service Management

VLAN functions of the MEN-4110B, port-based/tag-based and VLAN stacking, allows ISPs to provide certain services for such as per port per VLAN, per user per VLAN, per service per VLAN for their specific subscribers without overlapping VLAN IDs and without mixing the traffic from different customers. By simply adding a layer of IEEE 802.1Q tag to already tagged (802.1Q) packets and producing 'double-tagged' frames, the switch expands VLAN space. Thereby, ISPs using MEN-4110B can provide services with extra security and separation fulfilling the requirements of their subscribers in a network.

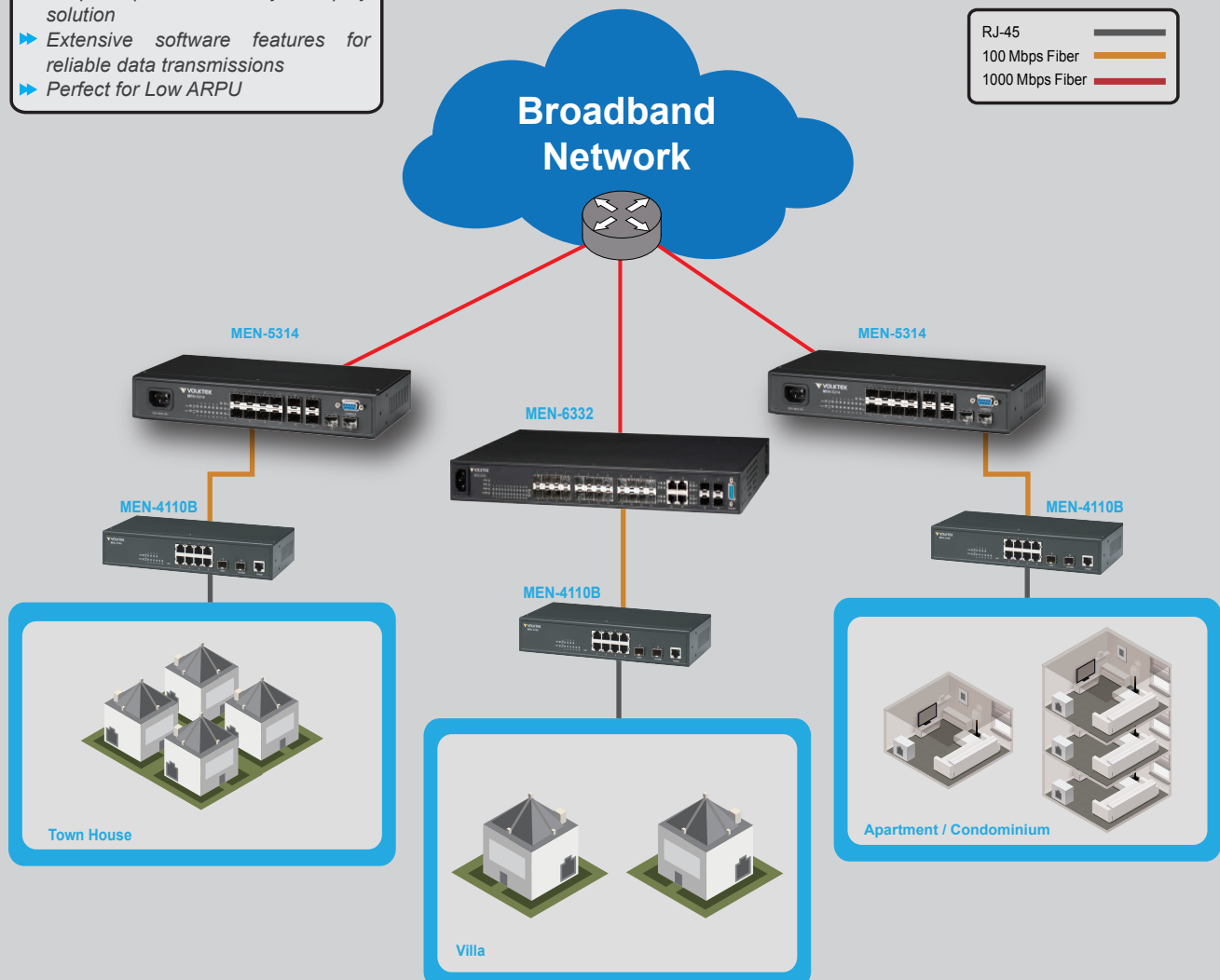
Unparalleled Network Performance

Excessive and unnecessary inbound unicast, multicast or broadcast traffic on physical interfaces can degrade your network performance and can even result in complete loss of network service. Storm control feature on the MEN-4110B enables ISPs to effectively monitor and limit incoming traffic, and prevent LAN ports from being disrupted by excessive traffic. In addition, Loop detection on the switch identifies loops in the network and disables the relevant ports to avoid broadcast storms, thus preventing from degrading the LAN and achieving maximum network performance.

Application

High-quality Data services in a small but powerful package

- ▶ Simple, quick and easy-to-deploy solution
- ▶ Extensive software features for reliable data transmissions
- ▶ Perfect for Low ARPU



Specifications

Features

Network Function	User Security
LACP Support/Static Link Trunking	MAC Filtering
STP/RSTP	Port Isolation
Loop Detection/Autorecovery timer	Static MAC forwarding
Traffic Monitor/Autorecovery timer	Port Security
VLAN Stacking (Q in Q)	ACL (L2/L3/L4)
Network Storm Protection	BPDU Guard/Filter
IGMP Snooping	DHCP Snooping
SFP DDMI support	802.1x Support
	ARP Inspection
	HDoS
Network Management	Traffic Management and QoS
Local Console	802.1Q Tag-based VLAN
Telnet and CLI	Port-based VLAN
Web-based GUI	Active VLAN Support 4K
SNMP v1/v2c	8 Queues on CPU
SNMP Trap	SP/WRR
RMON (1, 2, 3, 9)	Storm Control
Port Mirroring	Rate Limiting
Private MIB	802.1p/DSCP/ToS Support
Firmware Upgradeable	Management VLAN
Configuration Backup/Restore	
Port configuration, status, statistics	

Maximum Distances

Copper	100 m
Console	15 m
SFP	Up to 110 Km

Performance

Throughput	14,880 pps to 10 Mbps ports 148,800 pps to 100 Mbps ports 1,488,000 pps to 1000 Mbps ports
Switch Fabric	5.6Gbps
L2 Forwarding	4.16Mpps
MAC Table Size	16K
Packet buffer size	8Mbit
Jumbo Frame Size	10K

Standards

IEEE 802.3	10Base-T
IEEE 802.3u	100Base-TX/FX
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 802.1p	CoS Prioritization
IEEE 802.1q	VLAN Tagging
IEEE 802.1x	Port Authentication
IEEE 802.3	N-way Auto Negotiation

Power

Input	15V/2A DC Jack 12VDC Battery Backup
Power Consumption	9W (w/o Battery)

Interface

Ports	8 x 10/100Mbps (RJ-45) 1 x Fixed GbE SFP slot 1 x Multi-rate GbE SFP slot 1 x RJ-45 Console
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Mechanical and Environment

Operating Temperature	0°C~50°C
Storage Temperature	-20°C~70°C
Operating Humidity	10 to 80% RH (non-condensing)
Storage Humidity	5 to 90% RH (non-condensing)
Weight	1.2kg
Dimensions	268x44x128mm (WxHxD)

Ordering Information

MEN-4110B	Managed L2 8-port 10/100, 1 Gigabit SFP, 1 100FX/Gigabit SFP Switch, with Battery Backup
FPM-107	100Base-FX Multi-mode SFP, 2Km
FPM-107-30	100Base-FX Single mode SFP, 30Km
GBM-132	100Base-FX Bi-di Single Mode SFP Module, 20Km
GBM-104	1000Base-SX 1.25G, Multi-mode SFP, 500m
GBM-104-2	1000Base-SX 1.25G, Multi-mode, 3.3V, 1310nm, 2Km
GBM-104-10	1000Base-LX 1.25G, Single mode SFP, 10Km
GBM-123	1000Base-LX Bi-di Single Mode SFP Module, 10Km

*Specifications subject to change without notice.

Dimension

