MEN-5314

Managed Layer 2 Aggregation Fast Ethernet Switch

12-slot 100FX SFP + 2-slot Gigabit Multi-rate SFP

Device Locking | Power Backup | QoS Quality of Service | AC DC Power Redundancy | SNMP | PPPoE

Description

The MEN-5314 Managed Layer 2 Aggregation switch is an industry-first small form-factor fiber switch specifically designed considering the size constraints involved in on-field network deployments. Where time and space are constraints, and broadband competition is high, the MEN-5314 is a much quicker deployment solution that reduces time-to-deploy across large number of locations. Easily deploy the MEN-5314 along with your existing access switch cabinet and avoid unnecessary CAPEX by preventing additional cables and cabinet installation costs.

Equipped with 12-slot 100Mbps SFP downlinks plus 2 Gigabit Multi-rate SFP uplinks, the MEN-5314 is capable of connecting up to 14 network devices for Fast Ethernet and Gigabit Ethernet. Extensive software features of the switch deliver high-quality, reliable yet simple-to-use experience to its users. The MEN-5314 is a high performance and time-saving solution for service providers who want to increase the bandwidths, reduce transmission bottlenecks and offer highly flexible packages to low density subscriber base with medium ARPU.

Features Highlight
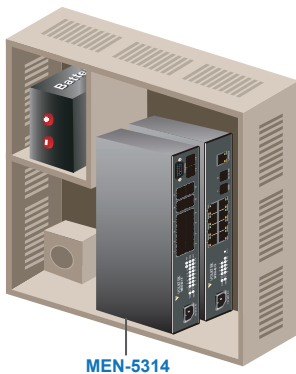
MEN-5314

Economic and Space-conscious Design

Built in compact, fanless and space-saving design to fit in confined spaces, similar in size to an access switch, the MEN-5314 is industry-first small-form factor aggregation switch. Now you can easily save your budget when deploying the MEN-5314 along with your existing access switch cabinet, preventing additional cables and cabinet installation costs, and avoiding unnecessary CAPEX. This flexible Ethernet switching solution enables you to quickly achieve profitability by improving productivity, cutting operational expenses and shorten your deployment time.

Quicker Deployment Solution

Where time and space are constraints, and broadband competition is quite high, the MEN-5314 proves to be an ideal solution for much quicker deployments in FTTx environments. With its impressive features, the MEN-5314 aggregation switch can be readily and quickly deployed in building aggregation levels, saving your valuable effort and time.

Return of investment (ROI)

The MEN-5314 delivers greater deployment flexibility for low density subscriber base at medium ARPUs, while protecting your initial deployment investment and staying in budget. This flexible Ethernet switching solution enables you to quickly achieve profitability by improving productivity, cutting operational expenses and shorten your deployment time.

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-5314 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

Issues that impact network performance can be quickly identified with enhanced traffic management, monitoring and analysis tools including SNMP and RMON. Designed to improve management efficiency, SNMP allows end users to centrally manage different levels in a network and RMON gives the capability to monitor the network performance. Service providers can ensure a reliable network by identifying connectivity and performance issues, and isolating the problem remotely on individual switches. This avoids high OPEX and manage a healthy and efficient 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 and traffic monitor features of the MEN-5314 enables ISPs to effectively monitor and limit incoming traffic to prevent disruption of LAN ports. In addition, loop detection on the switch identifies loops in the network and disables the relevant ports to avoid loop storms, preventing LAN degradation and achieving maximum network performance. These features along with auto-recovery timer deliver robotic methods to control your network automatically.

VOLKTEK

Features Highlight

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-5314 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-5314 reduces device thefts and provides a continuous network connectivity saving your infrastructure investments.

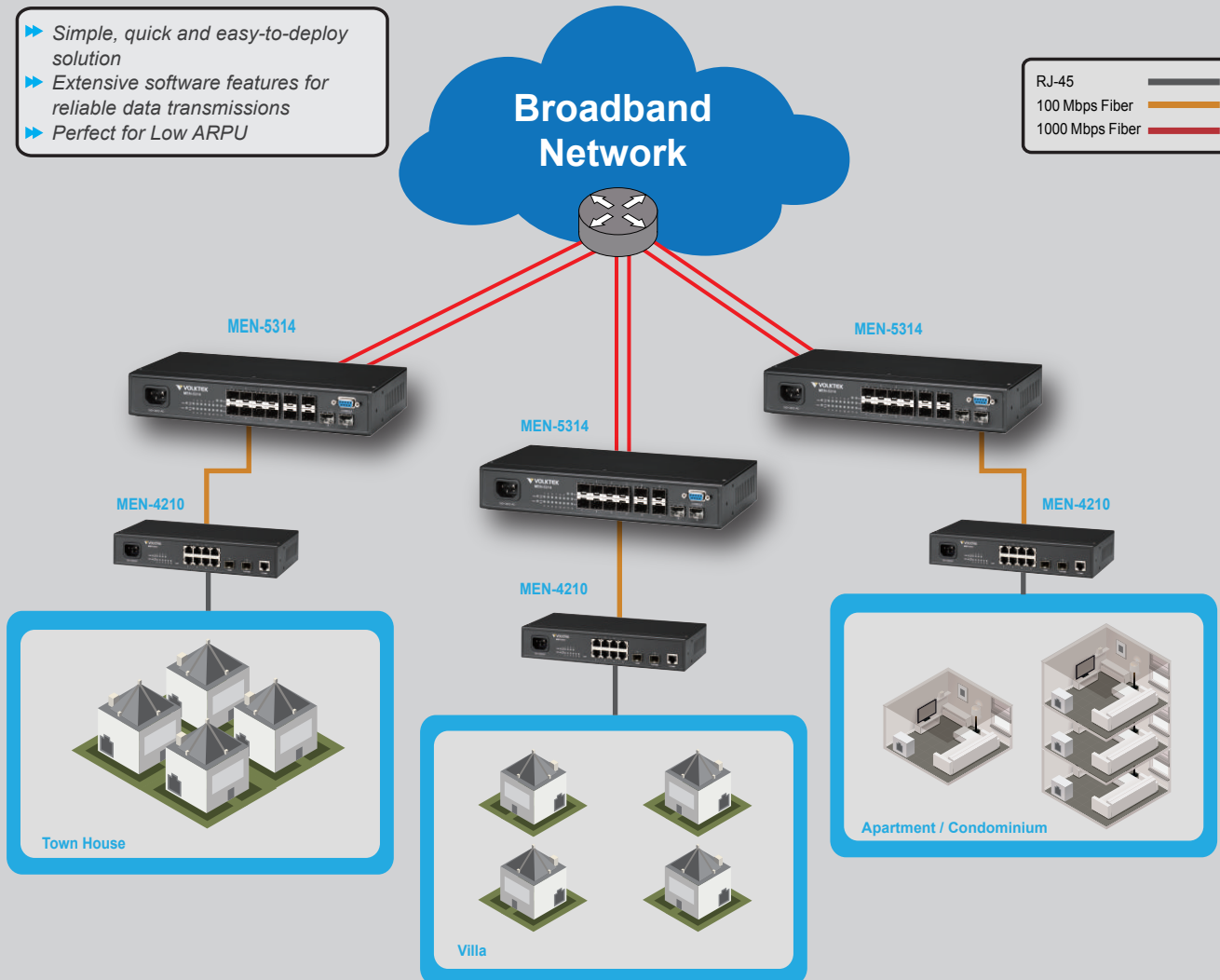### Non-stop Network with Redundant Power

Each time a power failure arises, the subscribers suffer from disrupted network and this in turn translates into loss of revenue. As one of the most innovative solutions for redundant power, the MEN-5314 is built with AC, DC and battery backup options to ensure that the device and the network are always available. This field-proven and most reliable solution enables service providers to provide continuous power supply to network devices and thereby allows them to provide non-stop services to their subscribers in even in power outages.

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

RJ-45	
100 Mbps Fiber	
1000 Mbps Fiber	

Broadband Network

MEN-5314

MEN-5314

MEN-5314

MEN-4210

MEN-4210

MEN-4210

Town House

Villa

Apartment / Condominium

Aggregation Level
MEN-5314: 12-slot Fast Ethernet SFP,
2-slot Gigabit Multi-rate SFP Managed L2 Aggregation Switch

Access Level
MEN-4210: 8-port 10/100Base-TX, 1-slot Fixed Gigabit SFP,
1-slot 100-FX/Gigabit SFP Managed Access Switch

Specifications

Features

Network Function	
LACP Support	RMON (1, 2, 3, 9)
Static Link Trunking	Status display and event report
Spanning Tree Protocol	SFP DDMI support
Rapid Spanning Tree Protocol	**User Security**
IGMP Querier	MAC Filtering
Loop Detection with Auto-recovery	Port Isolation
MVR	802.1x Support
Port-based VLAN	ACL L2/L3/L4
802.1q VLAN	DHCP Client/snooping
VLAN Stacking (QinQ)	DHCP Relay/option82
IGMP Snooping (v1/v2/v3)	ARP Inspection
PPPoE 7 Parameters (*)	Port security
Network Management	**Traffic Management and QoS**
Local Console	Flow control
Telnet CLI	4K Active VLAN Support
SNMP v1, v2c	802.1p Priority Queues per port
Web-based GUI	Traffic Classification
Port Mirroring	Network Storm Control
Firmware Upgradeable	Traffic Monitor with Auto-recover
Configuration Backup / Restore	Rate Limiting
Port configuration and statistics	SP/WRR
	Management VLAN

Maximum Distances

Console	15 m
SFP	Up to 110 Km

Performance

Throughput	148,800 pps to 100 Mbps ports
	1,488,000 pps to 1000 Mbps ports
Switch Fabric	6.4Gbps
L2 Forwarding	4.76Mpps
MAC Table Size	16K
Packet buffer size	12Mbit
Jumbo Frame Size	9K

Standards

IEEE 802.3u	100Base-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

Power

Input Voltage	100~240V AC, 12~15V DC
	Battery backup available on request
Power Consumption	21.3W (w/o Battery)

Interface

Ports	12 x 100Base-FX/SFP
	2 x GbE Multi-rate SFP
	1 x RS-232 Console (DB-9, female)

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-5314	Managed Layer 2 12-slot 100FX SFP, 2 100FX/Gigabit SFP Switch, w/ AC Power Supply, Built-in Battery Charge
MEN-5314D	Managed Layer 2 12-slot 100FX SFP, 2 100FX/Gigabit SFP Switch, w/ 48V DC Power Supply
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

(*) Function is available upon request.

Dimension

268.00

128.00

44.00