

# Managed Layer 3

Video

Audio



Data

Gigabit

Fiber Optic

# VIBC9632 Managed Layer 3 Aggregation Gigabit Ethernet Switch

24-slot Multi Rate 100 FX/Gigabit SFP + 4 Gigabit Combo Ports



Designed to meet the most demanding performance requirements of ISPs, MSOs and enterprises class network, the MEN-9632 implements latest and advanced technologies that perfectly suit Metro Ethernet Networks. Featuring complete Layer 2 and basic Layer 3 switching capabilities, the switch enables administrators to effectively manage network traffic transmissions. In addition, the MEN-9632 is built with powerful chipset and supported by hardware features such as Code Redundancy, Battery Backup and much more to offer best in class network performance, uptime and hardware monitoring capabilities.

The VIBC9632 is ideally designed to offer gigabit solution with its 24-slot Multi-rate 100FX/Gigabit SFP for real-time network applications that need extended reach and flexible operating bandwidths. And its 4 Gigabit combo uplink ports provide a convenient option for administrators to either use fiber or copper connection. As an ideal solution for large-scale networks, the switch provides rich management tools and diagnostic features such as SNMP, RMON and SFP DDML, all-in-one package of power, performance, and reliability and enables administrators to minimize OPEX even in today's growing networks that demand high bandwidth.



## Features Highlights

### Basic Layer 3 Features

Being a Layer 3 switch, the MEN-9632 is designed with intelligent modern routing capabilities such as Static-route and Inter-VLAN routing to maximize routing efficiency. While static routing can be used for small networks, Inter-VLAN routing brings capability to route traffic between VLANs. These both Layer 3 features provide logical segmentation of the network with additional security and separation of broadcast domains. The MEN-9632 implements Inter-VLAN routing, the best solution to route traffic between VLANs, that makes use of latest technology to ensure a very fast, reliable and cost-effective routing solution.

### Robust Network Security

The VIBC9632 implements complete Layer 2 to Layer 4 ACLs to restrict access to your sensitive network resources by filtering specific packets based on TCP/UDP ports, source and destination IP addresses or particular network devices. Furthermore, DHCP snooping, ARP, IEEE 802.1X and Port Security provide additional tools to manage access and levels of use of the network. These defence mechanisms of the MEN-9632 deliver robust network security and enables service providers to offer more stable services 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-9632 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.

### Multicast Video Service Support

Deploying multicast applications such as IPTV has never been easier than before with comprehensive multicast traffic functions, IGMP snooping and MVR, in the MEN-9632. IGMP snooping regulates multicast traffic in a given VLAN and MVR operates with hosts on different VLANs in a Layer2 network. These features on isolate the multicast streams and significantly reduce traffic from streaming media and other bandwidth-intensive IP multicast applications for better bandwidth. Thereby, the MEN-9632 supports applications that use multi-traffic in large scale across the network, saves network bandwidth, reduces operational burden and enhances the overall network performance.

### 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.

## Feature Highlights

### Advanced Hardware Features

Administrators can take full advantage of the MEN-9632's advanced and efficient hardware functions including SFP DDMI and Hardware monitoring IC for increased operational efficiency of network equipment. With SFP DDMI (Digital Diagnostics Monitoring Interface) enabled on the switch, administrators can easily monitor and troubleshoot SFP parameters such as temperature, voltage, laser bias current and evaluate SFP's working condition. In addition, administrators can easily monitor device operational status with Hardware monitor function which displays device main health parameters such as voltage, temperature and fans speed.

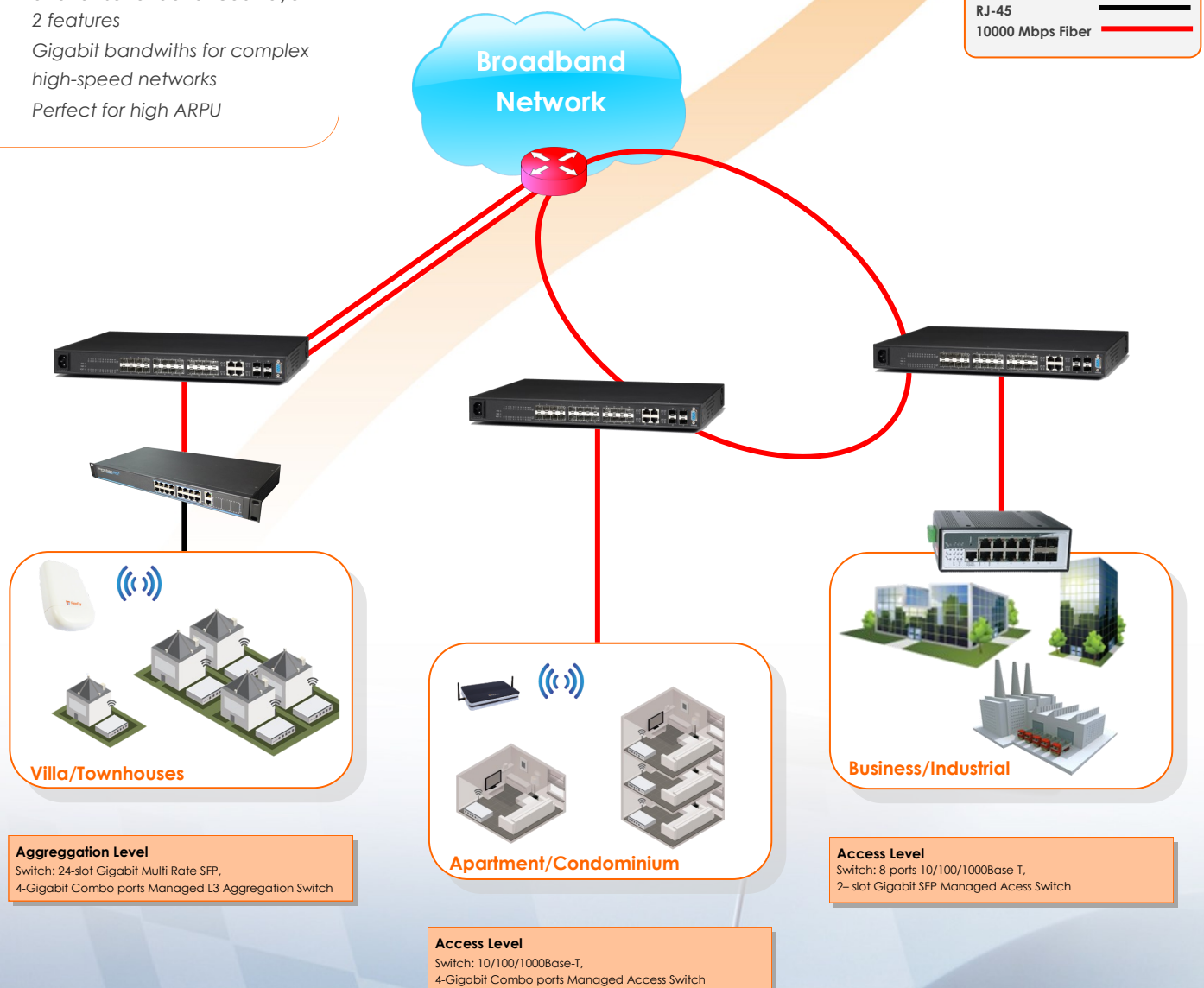
### High Performance

The 24 multi-rate SFP slots (100/1000Mbps) and 4 Gigabit Combo ports of the MEN-9632 are capable of providing a switching fabric of 56Gbps and high throughputs. The switch complements 41.7Mpps Layer 2 Forwarding and enables organizations to setup virtual private networks (VPNs) over public network. The task of upgrading LAN to cater the increasing demands of high bandwidth is now simplified using the MEN-9632. Service providers can connect up to 28 networking devices to the switch and using its multi-rate SFP ports they can serve their subscribers who opt for any high-bandwidth packages

## Application

- ⇒ Combination of basic Layer 3 and full-set of advanced Layer 2 features
- ⇒ Gigabit bandwidths for complex high-speed networks
- ⇒ Perfect for high ARPU

RJ-45  
10000 Mbps Fiber



## Specifications

### Features

<b>Network L3 Function</b>	Web-based GUI
Static Route	SNMP v1/v2c
Inter-VLAN routing	RMON (1,2,3,9)
<b>Enhanced Function</b>	Port Mirroring
Code Redundancy	Private MIB
MSTP	Firmware upgradable
Xpress Ring	Configuration, Backup/Restore
Dual Homing	Port configuration, status, statistics
Protocol-based VLAN	Device Lock
MAC-based VLAN	<b>User Security</b>
IP subnet-based VLAN	Port Isolation
GARP/GVRP	Static MAC forwarding
VLAN Trunking	Port Security
MAC-based 802.1x	ACL (L2/L3/L4)
IMGP Statistics/Group/Filter	BPHU Filter
IMGP Message Filter/Throttling	DHCP Snooping
DHCP Relay/Option 82	HDos, ARP Inspection
<b>Network L2 Function</b>	<b>Traffic Management and QoS</b>
LACP/Static Link Trunking Support	802.1Q Tag-based VLAN
STP/RSTP	Port-based VLAN
Multicast VLAN Registration	VLAN Stacking (Q in Q)
Loop Detection	Active VLAN Support 4K
VLAN Stacking (Q in Q)	8 Hardware Queues
Network Storm Protection	SP/WRR
SFP DDMI Support	Network Storm Control
<b>Network Management</b>	Rate Limiting
RS-232c Local console	802.1p/DSCP/Tos Support
Telnet and CLI	Management VLAN
<b>Maximum Distance</b>	
Copper	100 meter
Console	15 meter
SFP	Up to 110 Km.
<b>Performance</b>	
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	56 Gbps
L2 Forwarding	41.7Mpps
MAC Table Size	2MByte
Jumbo Frame Size	9K
<b>Interface</b>	
Ports	24 x 100/1000Base-FX/SFP 4 x GbE Combo 1 x RS-232 Console (DB-9, female)

### Standards

IEEE 802.3	10BASE-T
IEEE 802.3u	100BASE-TX/FX
IEEE 802.3ab	1000BASE-T
IEEE 802.3z	1000BASE-SX/LX/LHX
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 802.1s	MSTP
IEEE 802.v	Protocol-based VLAN's

### 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	4.5kg
Dimensions	440 x 44 x 284 mm.(WxHxD)

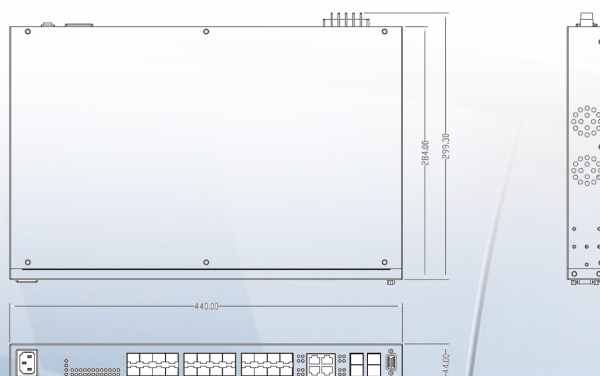
### Power

Input Voltage	AC: 100 ~240 Volt DC: 36 ~60V
Power Consumption	55W (w/o Battery)

### Ordering Information

<b>VIBC9632</b>	Managed Layer 3 - 24-slot 100FX/GbE SFP, 4GB Combo Switch, w/ AC Power Supply
<b>VIBC9632D</b>	Managed Layer 3 - 24-slot 100FX/GbE SFP, 4GB Combo Switch, w/DC Power Supply
<b>VIBC9632R</b>	Managed Layer 3 - 24-slot 100FX/GbE SFP, 4GB Combo Switch, w/ Redundant AC Power Supply
<b>VIBC9632DR</b>	Managed Layer 3 - 24-slot 100FX/GbE SFP, 4GB Combo Switch, w/ Redundant DC Power Supply
<b>SFP VIBC-107</b>	100Base-FX Multi-mode, 2 Km
<b>SFP VIBC-107-30</b>	100Base-FX Single-mode, 30 Km
<b>SFP VIBC-132</b>	100Base-FX , Bi-di Single Mode, 20 Km.
<b>SFP VIBC-104</b>	1000Base-SX 1.25 G, Multi mode, 500m.
<b>SFP VIBC-104-2</b>	1000Base-SX 1.25 G, Multi mode, 3.3V, 1310nm, 2Km
<b>SFP VIBC-104-10</b>	1000Base-LX 1.25 G, Single mode, 10Km.
<b>SFP VIBC-123</b>	1000Base-Bi-di Single mode SFP, 10 Km.

## Dimensions





## BCE Bos Consultancy Enterprises

**BCE Bos Consultancy Enterprises** is a Dutch based company, constantly building, extending and maintaining a network of distributors throughout Europe and Russia. Our aim is to identify resellers in each country to establish reliable long-term partnerships. **BCE** has the wide knowledge and specialization to deliver solutions for the high end of the security spectrum. **BCE** represents a large number of international manufacturers specialized in video networks for cities and industrial zones, thermal camera's, switches, personal media radio systems and covert solutions like as:



### CarTag

Wireless security system protect stealing parts from cars parked at parking places of dealers, lease companies and fleetowners.



### DigiController

IP Based I/O controller supporting many connectivity protocols



### Rapidcam

Rapid deployment, user friendly, easy to install stand alone camera solution which can be used both for observation and covert purposes.



### Thermal camera program

Thermal camera solutions for use at Industrial sites, Border Control, Airports, Harbours, Perimeters etc.

Fro bright exposure in colour in day time and monochrome during night time.

Solutions up to a distacne of 5 Kilometers



### ANPR Camera program

ANPR camera program to monitor number plates for sites, parking lots, and entry/exit gates up to a speed of 220 kmph. Complete delivery with ANPR software.



### Body Warn Camera program

The most reliable Portable Law Enforcement camera system used by Police, Special Forces, Border Control, Firebrigades, Surveillance and security Guards.



### Smartdetect

Full stand alone camera system. Can be either used as point to point communication as well as within remote network environments. Specially designed for observation and covert operations.



### Wavesight

Wireless Outdoor Video Network solutions suitable at cities, harbors, airports, and industrial areas. Providing stable Point to Point and Point to Multipoint connections up to 300 Mbps and 40 kilometer of distance with license free and licensed connections.



### Switches and power supplies

A great variety of industrial and desktop switches. Managed, un-managed, PoE PoE+ switches suitable for integrated use at suveillance systems of cameras and wireless radio configurations. Up to 1 Gb.



### Patio Mounts and brackets

Robust steel galvanised, aluminium or stainless steel patio mounts, pole extenders, L + M wall brackets and U-Clamps in different size and design. Ideal for easy installation of radios and cameras at top of buildings, poles and walls.



### Stand Alone Solar Power system

The small light weight portable and rapid deploy solar solution for camera's and radio's at sites without any infrastructure

DISTRUBUTED BY:



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