



Embedded Technologies \ Networking:

Ethernet Diagnostic Module

9300-8EDM

Ethernet Diagnostic Module is 8-port 10 / 100 Mbit/s switch with 1 Gbit/s fiber optic uplink and a number of advanced functions for diagnosis, management and monitoring of ethernet networks. Also available is cheaper 4-port version without fiber optic uplink.

The device is intended for industrial use (PLC language integration), but can be applied also in the IT environment.

The differences from common ethernet switch are:

Industrial integration:

- **EtherNet/IP (CIP) Support:**
The device supports this protocol commonly used in the industrial automation environment. Easy control from RS Logix via I/O tags.
- **SMS and e-mail PLC extension:**
Attached PLC unit can send warning emails and SMS through this device.
- **RS Logix Integration:**
The unit is fully RS Logix-enabled. Additional features are configurable and readable directly from RS Logix (AOP – custom Add-On Plugin).

Network traffic control:

- **DHCP by port:**
Assigns always the same IP address per port. This eliminates the need of IP setup of any new device for example after change.
- **IGMP Snooping:**
The module supports IP-multicast commonly used e.g. for video streaming or VoIP communication. Industrial automation environment requires IGMP snooping enabled devices because it saves network bandwidth.
- **VLAN, QoS:**
Two standard features for network splitting and packet prioritization.
- **Port control:**
Speed, duplex and flow control parameters can be set for each port.



Diagnosis and Monitoring:

- **Port mirroring:**
Mirrors transferred data on selected ports to defined output port – replaces HUB when sniffing and does not slow down the network.
 - data type (incoming / outgoing / all)
 - MAC address (sender / receiver).
- **Bandwidth alarm:**
Actual data bandwidth can be saved as „reference traffic“. When current traffic differs more than is set (%), an alarm state is toggled.
- **Automatic e-mail alerts, SMS alerts:**
When defined alarm state occurs you are informed about it via e-mail or SMS message.



Optional: SFP Gigabit Fiber Optic Transceiver

Security:

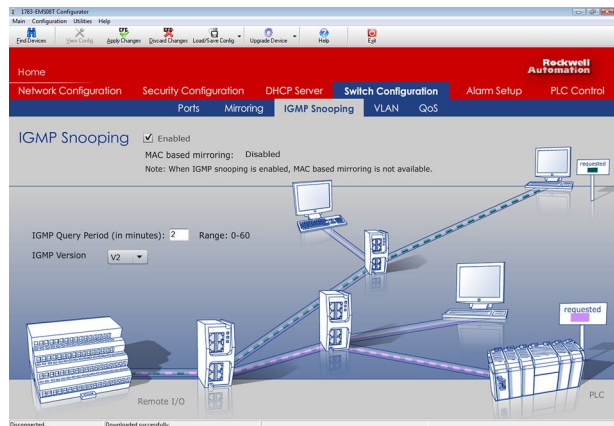
- **MAC address management:**
Unknown device connection toggles an alarm state, the user is informed (e-mail, SMS), affected port is disconnected or all ports are disconnected. For each MAC can be set up symbolic name for easier management.
- **Port control by PLC:**
One or all ports can be disconnected, based on PLC request.



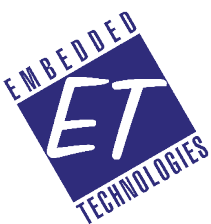
DIN rail montage

Parameters:

- DHCP server, ACD
- UDP setup
- WWW configuration, FTP, Telnet, Windows Flash application (see the pic.)
- DIN rail montage
- Power supply 8 - 48V DC or 230V adaptor
- Industrial design



Configuration application (Flash), simply explains e.g. IGMP Snooping



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