EXU Ethernet Switch Unit (8 Port)

AVARA
TECHNOLOGIES

EXU is a high-reliability, feature rich, 8 Port Ethernet Layer-2 switch. The EXU brings additional switched Ethernet functionality with PoE to the DynaFlex Multiservice Access Platform.

The EXU is specifically designed to match the challenging environmental and power requirements in Dedicated Networks.

The EXU has eight 10/100Base-T interfaces, supplied by industry-standard RJ45 connectors. The unit supports Auto MDI/ MDIX, so that cross-over cables are not needed.

Additionally 8 WAN ports are provided which operating at Nx64K speeds.

Tag based VLANs (802.1q) are supported, allowing network segmentation without being restricted by physical connections.

VLAN, access port, trunk port & filtered trunks ports are supported, with support for per VLAN MAC address tables, offering network designers more flexibility.

Port based VLANs are also supported allowing a LAN port to be directly connected to a WAN port. WAN down/LAN down and LAN down/WAN down functionality is also available.

Four levels of QoS are supported.

Rate limiting on the Ethernet ports is provided, preventing unpredictable network performance due to broadcast storms of malfunctioning equipment.

The Spanning Tree Protocol is supported on all ports for tolerance against loops being formed.

Access control based on 802.1X and MAC address locking is provided on the 10/100Base-T ports to ensure only authorised network access is possible.

The EXU can be used in existing PDH multiplexer locations, where switched Ethernet is required. This eliminates the need for an external switch, with a separate power supply and management system.

The PoE capability allows the use of remote devices that can be powered from PoE ports facilitating installations.

With an increasing number of critical services migrating to Ethernet, the EXU has been designed with an extremely high MTBF and for operation in extreme temperatures.

The EXU can be managed through the DynaFlex multiplexer card via CLI or remotely using Telnet, SNMP or Q1.

These management interfaces can be supported over a separate VLAN thus offering a greater level of security for management traffic.

Software download is available using TFTP, thus reducing installation time.

Technical Highlights

- 8 x 10/100Base-T
- 8 x WAN Ports Operating at Nx64K
- 802.1p, 802.1q
- 802.1X
- Rate Limiting
- PoE Support (on four ports 15.4W max per port)
- Spanning Tree Protocol (STP) Support
- Support for 4095 VLANS
- Per VLAN MAC Address Table
- Port based VLAN support
- Remote Management via SNMP & Telnet via DynaFlex Multiplexer Unit
- -20 to -72 VDC Power Supply
- -20°C to +65°C Operation

Technical Specifications

Model Order Code	P61035.01	MTBF	68 Years
Mechanical Height Depth Width	 233mm 160mm 25mm	**Power** Power Supply Power Consumption PoE Output Power	 -20 to -72 VDC 15 W (Max.) 12 W Typical 15.4W per port (max)
Customer Interfaces Ethernet WAN Ports Number of PoE Ports	 8 x 10/100Base-T (RJ45) 8 4	**Security** Data Interfaces Management	 Dedicated VLAN, 802.1X, MAC Address Locking Password Protection, Dedicated VLAN
WAN Port Parameters Speed Operating Mode	 N x 64K (N = 1 to 31) HDLC or PPP	**Environmental** Operating Temperature Relative Humidity	 -20 °C to +65 °C 5-90% (Non-condensing)
Switch Parameters Speed Auto negotiation Duplex MDI/MDIX Support IEEE 802.1p/q MAC Address Size Max Frame Size VLANs Supported Rate Limiting Traffic Shaping Priority Queues Per Output	 10/100Base-T Yes Full/Half Yes Yes 8K 1632 Bytes 4095 128K, 256K, 512K, 1M, 2M, 4M, 8M Strict & Weighted Round Robin 4	**Standards**	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.1p VLAN Tagging IEEE 802.1q Priority Queuing IEEE 802.3x Flow Control IEEE 802.1D MAC Bridges IEEE 802.1X Port Based Network Access Control RFC1157 SNMP RFC1213 MIB II RFC854 Telnet RFC783 TFTP EN55022 Class A Emissions EN60950 Safety EN55024 Immunity EN50082-2 Generic Immunity IEC 61850-3 Immunity ETS 300 019 -1-1 Operational ETS 300 019 -1-2 Storage ETS 300 019 -1-3 Transport A-tick / C-tick / CE Mark
Management Local Remote Q1	 CLI via Console (RS-232) Telnet, SNMP, ASPeCT (via DynaFlex Multiplexer Unit) V.11 MI/DI TS0/TSx (via DynaFlex Multiplexer Unit)		