WAN Monitor with Ethernet Output

# For Wired, DS3/E3, HDLC/PPP Applications

September 15th, 2011 -- Models V5.4



## **Technical Specifications**

### General

E3Switch provides custom h/w and s/w solutions with short turnaround times to meet requirements not shown below.

Indicators:	LAN Status/Rx; Telcom Status/Rx; WAN Bit Error or Alarm.
WAN Data Rate:	DS3/T3: 44.736 Mbit/s; E3: 34.368 Mbit/s.
Management:	SNMPv2c with VACM View-Based Access Control; HTTP comprehensive web interface; in-band through any LAN port or out-of-band with second SFP LAN port option. – VLAN QinQ
LAN:	Layer 2 headers; 100Base-TX to 1650 bytes (9600 byte and 1000Base-T options), SFP copper/optical available
Mechanical:	19"-rackmount single-card to 20-card chassis.
Electrical:	100-240VAC or ±35-75VDC. Redundant-power options available.
Firmware Upgradeable Features:	GbE/1000BASE-T/Jumbo-Frame; Optical SFP LAN

### Network/Link

HDLC/PPP Data Format:	CRC16/32/none; x43 scrambling on/off.
DS3/E3 Frame Format:	C-bit / M13 / M23 / G.751 – HDB3/B3ZS encoding – Clear channel (no T1/DS1/E1 tributaries) or unframed.
DS3/E3 Waveshape Compliance:	ANSI T1.102-1993, Telcordia TR-NWT-000499 and GR-253-CORE, ITU-T G.703.
DS3/E3 Cabling:	DS3/T3: 300 meters; E3: 480 meters to radio/CSU; BNC – 750hm one rx, one tx.
LAN Layer-1:	100 Mbit/s full duplex – Autonegotiation – Auto-MDIX crossover correction. 1000BASE-X SFP available.
LAN Layer-2:	1650 byte packets and jumbo option. Configurable WAN-data encapsulation headers.

### Mechanical/Electrical

Dimensions (WxLxH):	Standalone: 4.75" wide 1U with 19" rackmount brackets (120mm x 215mm x 38mm (4.75" x 8.5" x 1.5"); 6-slot/1U and 20-slot/3U NEBS-III redundant power chassis available.
Weight:	1 kg / 2 lbs.
Power:	100-240VAC or ±35-75VDC – 6 Watts. Redundant supplies available.
Power Connector:	VAC: IEC connector. VDC: Screw Terminal
LAN Connectors:	One 100BASE-TX, 8P8C (RJ-45); One optional SFP port. Optional 1000BASE-T upgradeable.
DS3/E3 Connectors:	Four 75-ohm BNC – one rx, one tx for each circuit direction.

### **Environmental**

Operating Temperature:	0° C to 50° C (30° F to 122° F)
Storage Temperature:	-20° C to 70° C (-4° F to 158° F)
Operating Humidity:	10% to 90% Non-Condensing
Storage Humidity:	5% to 95% Non-Condensing

### Regulations

RFI/EMI/RoHS:	FCC Part 15B, Class A; EMC Directive (2004/108/EC) (CE Mark); EN55022/24, Class A; AS/NZS 3548 (C-
Krijewijkons.	Tick Mark); ICES-003, Class A; VCCI, Class A; RoHS Directive 2002/95/EC and others.

### **For More Information:**

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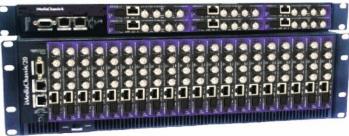
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# WAN Monitor with Ethernet Output

## For Wired, DS3/E3, HDLC/PPP Applications

March 6th, 2011 -- Models V5.4-6c/20c



### **Technical Specifications**

### General

With up to 40 circuits monitored in a single, manageable, carrier-class chassis, the E3Switch multi-card Model 6c/20c provides a high-reliability and high-flexibility option for central office applications. Continuous operation is maintained with hot-swappable dual or mixed AC/DC supplies, hot-swappable conversion cards, and independent SNMP management of chassis temp/power/fan with last-gasp notification. Per-card single or dual jumbo-frame copper/SFP LAN ports monitor inline or tapped DS3/E3 circuits containing HDLC/PPP packets. Pair this multi-slot chassis with similar or single-units at a remote location.

E3Switch provides custom h/w and s/w solutions with short turnaround times to meet requirements not shown below.

Topology:	6-card or 20-card. 2 DS3/E3 channels per card monitored by 1or 2 GbE LAN
Indicators:	LAN Status/Rx; Telcom Status/Rx; Bit Error.
WAN Data Rate:	DS3/T3: 44.736 Mbit/s; E3: 34.368 Mbit/s per channel.
Management:	Cards: SNMPv2c with VACM and HTTP comprehensive web interface; Independent chassis SNMP.
LAN:	1000BaseT and/or 1000Base-X SFP up to 9700 bytes - Stacked VLAN q-in-q - 500kByte total buffers;
Mechanical:	19"-rackmount; 6-card 1UI, 10" deep; 20-card 3UI, 14" deep;
Electrical:	100-240VAC and/or -48VDC, dual, redundant, load-balancing hot-swappable supplies.

### Network/Link

HDLC/PPP Data Format:	CRC16/32/none; x43 scrambling on/off.
DS3/E3 Frame Format:	C-bit / M13 / M23 / G.751 – HDB3/B3ZS encoding – Clear channel (no T1/DS1/E1 tributaries) or unframed.
DS3/E3 Waveshape Compliance:	ANSI T1.102-1993, Telcordia TR-NWT-000499 and GR-253-CORE, ITU-T G.703.
DS3/E3 Cabling:	DS3/T3: 300 meters; E3: 480 meters to radio/CSU; BNC – 75ohm.
LAN Layer-1:	Single or dual LAN port per card; 1000BaseT and/or 1000Base-X SFP full-duplex – Autoneg/auto-MDIX.
LAN Layer-2:	9700-byte Jumbo Frames; Configurable WAN-data encapsulation headers.

### Mechanical/Electrical

Dimensions (WxLxH):	19"-rackmount; 20-card 3UI, 14" deep; 6-card 1UI, 10" deep.
Weight:	20-card: 35lbs (16kg); 6-card 15lbs (7kg)
Power:	Dual, redundant hot-swap supplies any combination of 100-240VAC or -48VDC - 6 Watt/card
LAN Connectors:	One 1000BaseT, RJ-45 and one optional SFP port per card
DS3/E3 Connectors:	75-ohm BNC – one rx, one tx or second optional T3/E3/DS3 channel per card

### **Environmental**

Operating Temperature:	0° C to 50° C (30° F to 122° F)
Storage Temperature:	-20° C to 70° C (-4° F to 158° F)
Operating Humidity:	10% to 90% Non-Condensing
Storage Humidity:	5% to 95% Non-Condensing

### Regulations

RFI/EMI/RoHS:	FCC Part 15B, Class A; EMC Directive (2004/108/EC) (CE Mark); EN55022/24, Class A; AS/NZS 3548 (C-
KFI/LIMI/KOH3.	Tick Mark); ICES-003, Class A; VCCI, Class A; RoHS Directive 2002/95/EC and others.

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