

High-Speed Ethernet to DS3/E3 Rate Converters

For Wireless, Optical and Wired Applications

October 23rd, 2009 -- Models V5.4



Technical Specifications

General

E3Switch can provide custom h/w and s/w solutions, often within a week, to meet requirements not shown below.

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|---------------------------------------|--|
| Indicators: | LAN Status/Rx; Telcom Status/Rx; Bit Error. |
| True User Data Rate: | Single: DS3/T3: 43.4 Mbit/s ; E3: 33.2 Mbit/s . Dual DS3/T3: 86.8 Mbit/s ; E3: 66.4 Mbit/s |
| Aggregate 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 |
| LAN: | 100BASE-TX to 1650 bytes or more – Stacked VLAN q-in-q – 1/2MByte buffer; 1000BASE-X SFP available |
| VoIP: | Dedicated VoIP queue for low-latency VoIP processing |
| Mechanical: | VAC: 4.75" wide with 19"- rackmount brackets;VDC: 3.5" wide, DIN-railmount or rackshelf |
| Electrical: | 100-240VAC or ±35-75VDC |
| Firmware Upgradeable Features: | GbE/1000BASE-T/ Jumbo-Frame ; Single or Dual Telco Path with automatic failover; Optical SFP LAN |

Network/Link

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| 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 one rx, one tx. |
| LAN Layer-1: | 100 Mbit/s full duplex – Autonegotiation – Auto-MDIX crossover correction. 1000BASE-X SFP available. |
| LAN Layer-2: | 802.3x flow-control; 802.1p QOS/priority for VoIP; 1650 byte packets; Transparent VLAN |
| Packet Filtering: | No filtering. Broad/Multicasts forwarded to link; 400kByte buffering. |
| Packet Priority: | Separate high-priority queue for 802.1p priority packets (i.e. VoIP). |

Mechanical/Electrical

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| Dimensions (WxLxH): | VAC: 120mm x 215mm x 38mm (4.75" x 8.5" x 1.5") – ships with 19" rackmount brackets; VDC: 110mm x 100mm x 22mm (4.5" x 4.25" x 0.8") – 19" rackmount brackets. NEBS-3 multcard available |
| Weight: | VAC: 1 kg / 2 lbs. – VDC: 0.5 kg / 1 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: | Two 75-ohm BNC – one rx, one tx; Second optional T3/E3/DS3 channel. |

Environmental

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|-------------------------------|-----------------------------------|
| 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

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

For More Information :

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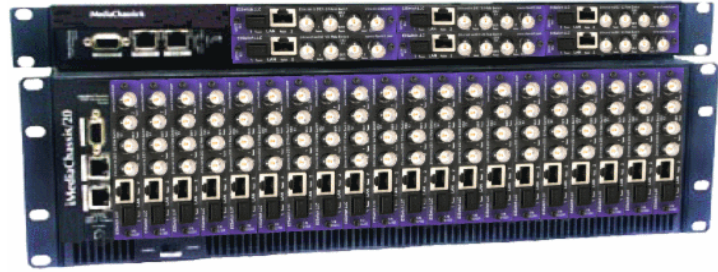
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High-Density, Managed Ethernet to DS3/E3 Rate Converters

For Wireless, Optical and Wired Applications

October 23rd, 2009 -- Models V5.4-6c/20c



Technical Specifications

General

Unmatched in data throughput and with up to **40 channels** of **variable-topology** and fault-tolerant **jumbo-GbE** to DS3/E3 conversion in a 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 feed bonded or isolated DS3/E3 ports in a variety of **user-configurable VLAN or failover topologies**. Pair this multi-slot chassis with similar or single-units at the remote location.

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

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| Topology: | 6-card or 20-card. 2 DS3/E3 channels per card bonded or isolated and sourced by 1,2 or failover GbE LAN |
| Indicators: | LAN Status/Rx; Telcom Status/Rx; Bit Error. |
| User Data Rate: | Single: DS3/T3: 43.4 Mbit/s ; E3: 33.2 Mbit/s . Dual DS3/T3: 86.8 Mbit/s ; E3: 66.4 Mbit/s per channel |
| Aggregate 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; |
| VoIP: | Dedicated VoIP queue for low-latency VoIP processing |
| 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

| | |
|-------------------------------------|--|
| 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; 802.3x flow-control; 802.1p QOS/priority for VoIP; Transparent VLAN |
| Packet Filtering: | No filtering. Broad/Multicasts forwarded to link; 500kByte aggregate buffering. |
| Packet Priority: | Separate high-priority queue for 802.1p priority >=6 (i.e. VoIP). |

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

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