



Z H O N E

8 Port E1 Network Extender

ENE2084-S, ENE2084-P, ENE2084-KIT

Eight Port Loop Bonding E1 Network Extender

- ✓ *Enables providers to deliver Ethernet to anywhere that can be served by E1 or Fractional E1 circuits*
- ✓ *Configuration-free operation ensures simplicity and cost-effective Ethernet over WAN connections without truck rolls*
- ✓ *Automatic load balancing and fail-over on bonded ports for optimum throughput and redundancy*
- ✓ *Metro Ethernet Forum (MEF 9/14) Certified for EVPL and E-LAN services*
- ✓ *Environmentally hardened and NEBS Level 1 Certified*
- ✓ *Full support for Multimedia Traffic Management, providing sophisticated IP QoS and application-aware traffic control*
- ✓ *CLI, SNMP, and Web-based Management*



The ENE2084 allows Carriers, ISPs and PTTs to deliver Ethernet services to virtually anywhere, using standard E1 or Fractional E1 circuits. The ENE2084 offers up to 16Mbps of extremely reliable and efficient Ethernet service over the WAN, delivering the bandwidth required to support a sophisticated new generation of small and medium business customers.

Because the ENE2084 uses standard E1, it can go almost anywhere, and because it uses Ethernet instead of ATM or Frame Relay, it's ready to support 100% of the high-demand IP applications—including video conferencing, digital video surveillance, IP telephony and more. It uses Ethernet for all data transport, and is optimized for the delivery of Internet Protocol (IP) traffic.

The ENE2084 features eight (8) E1 ports, each capable of up to 2 Mbps bandwidth, and an integrated 4-port 10/100 Ethernet Switch. When used with a compatible product, any or all of the eight ports may be used together to deliver increased bandwidth at any given distance. The loop bonding technology used is automatic, efficient and resilient, providing configuration-free deployment and a greater total throughput than traditional T1/E1 circuits.

The ENE2084 can be used in pairs with any other Zhone Ethernet E1 product, including E1 NeTwork Extenders, the MALC multi-service BLC, and the 12000/4000 series of IP DSLAMs. Either way, the ENE2084 supports important Ethernet features such as 802.1Q VLANs, Built-in security features, and the advanced QoS and traffic control features that come with Zhone's Multimedia Traffic Management.

Technical Specifications

Dimensions

- 1.25" x 8.5" x 4.75" (HxWxD)
- 3.2cm x 21.6cm x 12.1cm (HxWxD)

Weight

- 1.0 lbs (0.45 kg)

Power

- DC Input:
 - 15 Watts
 - 0.3A @ -48VDC
- AC Supply (optional):
 - 100-240VAC, 50/60Hz
 - 48VDC, 0.42A

Interfaces

- 8 x E1 RJ48C 8-position jack
- 4 x 10/100 Ethernet RJ45

Standards Support

- NEBS Level 1
- MEF 9/14 (EVPL and E-LAN)
- GR-063-CORE
- GR-1089-CORE
- IEEE 802.3 Ethernet
- IEEE 802.1p Priorities
- IEEE 802.1Q VLAN
- IEEE 802.1p QoS, DiffServ, TOS

Protocol Support

- Transparent 802.1D Bridging
- E1 Line Code: HDB3, AMI
- Internet Protocol
- Loop Bonding

Management

- SNMP
- CLI
- Web Based Management

Bandwidth/Distance

- Up to 2.0 Mbps per E1 port
- Up to 8-E1 Bonded circuits (up to 16 Mbps)
- Selectable Fract E1 Support: 256, 512, 768, 1024, 1280, 1536, 1792, 2048Kbps

Regulatory Compliance

- EMC: FCC Part 15; ICES-003; EN 300 386-2
- Safety: UL1950, CSA C22.2 No. 950; EN60950; IEC950; CE Marking

Operating Requirements

- Temperature: -40°F to 158°F (-40°C to 70°C)
- Non-operating: -40°F to 158°F (-40°C to 70°C)
- Humidity: 5% to 95%, non-condensing
- Altitude: -200ft to 16,500ft (-60m to 5,000m)

Ordering Information

8-Port E1 Network Extenders - Single Units

ENE2084-S-DC	8-Port E1 Subscriber Unit for -48VDC
ENE2084-S-ACEU	8-Port E1 Subscriber Unit with EU Power Supply
ENE2084-S-ACUK	8-Port E1 Subscriber Unit with UK Power Supply
ENE2084-P-DC	8-Port E1 Provider Unit for -48VDC
ENE2084-P-ACEU	8-Port E1 Provider Unit with EU Power Supply
ENE2084-P-ACUK	8-Port E1 Provider Unit with UK Power Supply

8-Port E1 Network Extender Kits

ENE2084-KIT-DC	8-Port E1 Starter Kit Includes (1) ENE2084-S and (1) ENE2084-P for -48VDC
ENE2084-KIT-ACEU	8-Port E1 Point to Point Kit Includes (1) ENE2084-S and (1) ENE2084-P with EU AC Power Supplies
ENE2084-KIT-ACUK	8-Port E1 Point to Point Kit Includes (1) ENE2084-S and (1) ENE2084-P with UK AC Power Supplies

Optional 19/23-inch Rack Mount Kit

NETEXT-RMT-KIT	Net Ext, Rack Mount Tray, TNE15X4/ENE20X4, ETHX22X4/ETHX21XX, SNE2040G
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