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PRODUCT BRIEF

NETH12E1DI

Dual channel E1 drop and insert multiplexer with a 10/100BaseT local interface.

Description

The Netshield NETH12E1DI is dual channel E1 drop and insert multiplexer with a 10/100BaseT local interface. The units has 2 x structured E1 ports, 1 x downstream E1 and 1x upstream E1 and a 10/100BaseT Ethernet port for access solution. Several timeslots can be dropped or inserted at any centre point and the remainder of the channels simply go straight-through from upstream to the downstream. The units comply with ITU-T G.703 E1 interface standard. The units can be cascaded to the same devices or the other related devices, each node then uses several timeslot, and the 32 timeslots in E1 make it possible that the data from 31 nodes can be collected and transmitted and received.

Features

- Dual G.703 E1 line interfaces with HDB3 encoding compliant with the ITU-T G.703 and ITU-T G.704 specifications.
- Digital clock recovery technology and integrated phase locked loop with jitter performance compliant to G.823 and G.742 protocol standards.
- Rate of the interface: 2.048Mbit/s±50ppm, the data transmission rate supports N*64K (N=1~32), and the hardware enables the random selection of the several concurrent timeslots from 31 available timeslots.
- Clock mode: The output clock of upstream E1 is as a derived clock from input upstream E1 signal. Line clock in downstream line can be synchronized to downstream received clock or the internal oscillator clock.
- Alarm indicators on front panel
- The ETH interface is auto selected crossover or straight-through cable, and supports 10M / full-duplex 10M / half-duplex, 100M / half-duplex, 100M / full-duplex, 10M/100M autosensing.
- The network administration channel is reserved; the network administration function can be added according to the need
- 2 E1 framed ports - downstream E1 and upstream E1
- Daisy chain, Star and Point to Point configurations possible

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Specifications

Sub & Main E1 port interface parameter:

- Channel capacity: 1 Channels.
- Interface rate: unframing/framing: N*64Kbps，N=0~31;
- Bit Rate: 2.048 Mb/s ±50 ppm:
- Line Code: HDB3:
- Line Impedance: 120 Ohm / 75 Ohm:
- Connector: RJ-45 or BNC:
- Pulse Shape: ITU-T G.703. Jitter
- Performance: ITU-T G.823, clock: inter-clock, line-clock, Output jitter<0.05UI

Ethernet interface:

- Interface Rate: 10/100Mbps
- Duplex: half and full duplex self-adapt.
- Interface character: match IEEE802.3, IEEE802.1 Q(VLAN)
- Connector: RJ45, support autosensing
- MAC address capability: 4096

Power:

- DC: -48V (-36 to -72V);
- AC: 90 to 260 VAC ; 47 ~ 63Hz
- Power Interface: DC power terminal / AC socketPower
- Consumption: <5 W

Working environment:

- Operating temperature: 0 to 50 °C
- Storage temperature: -20; to +70 °C
- Relative humidity: 5% to 90% (25 °C no condense)

Dimensions

- Width 230mm × Height 49mm×Depth 143mm

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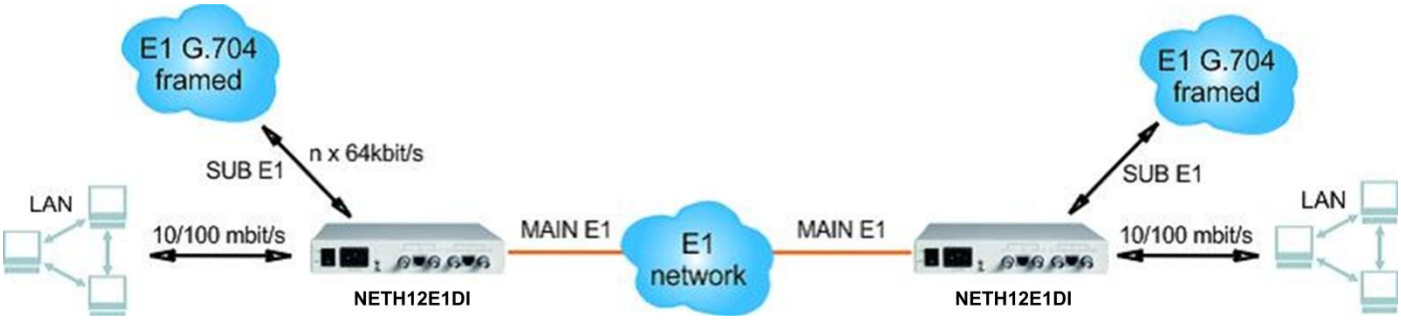
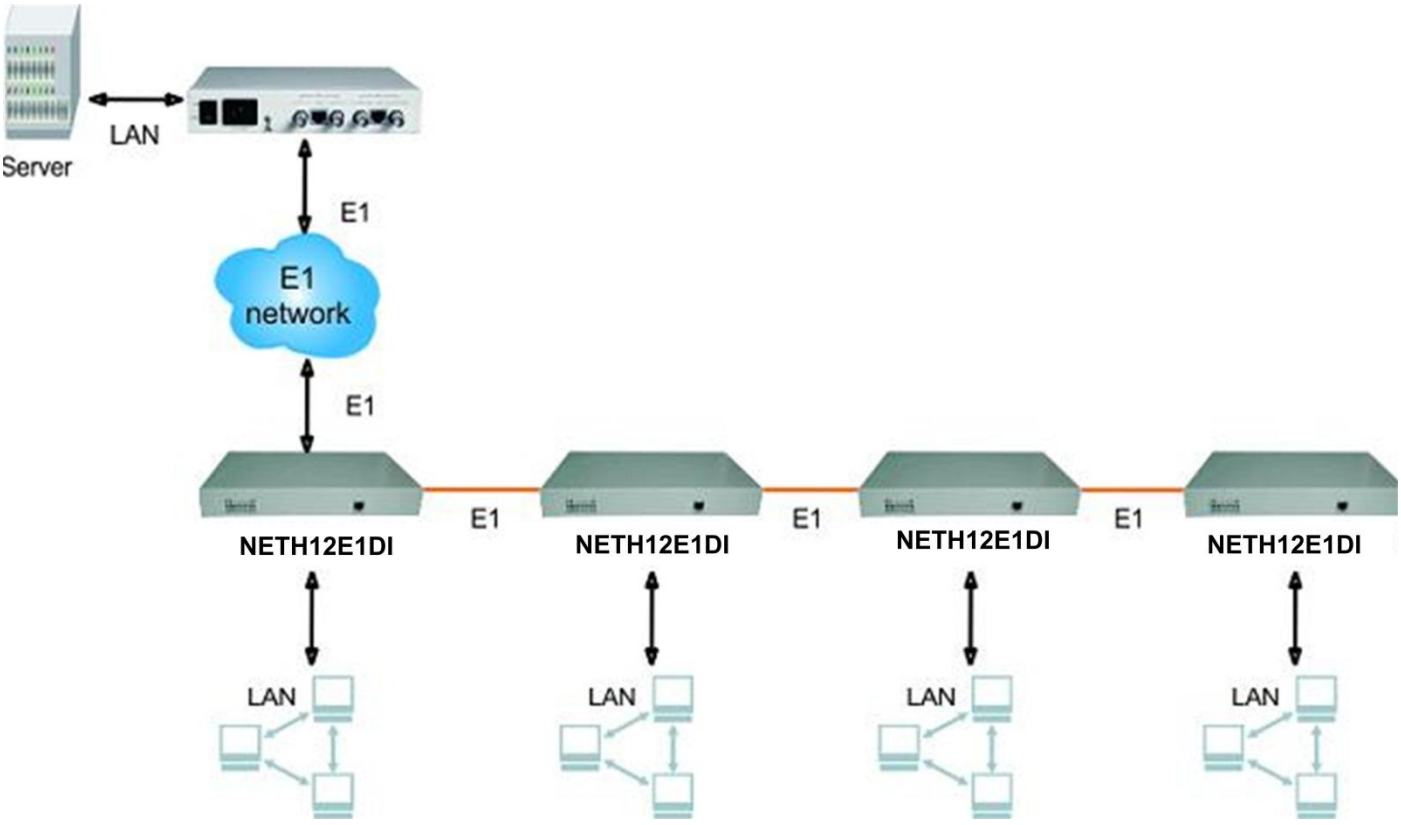
Application Scenarios

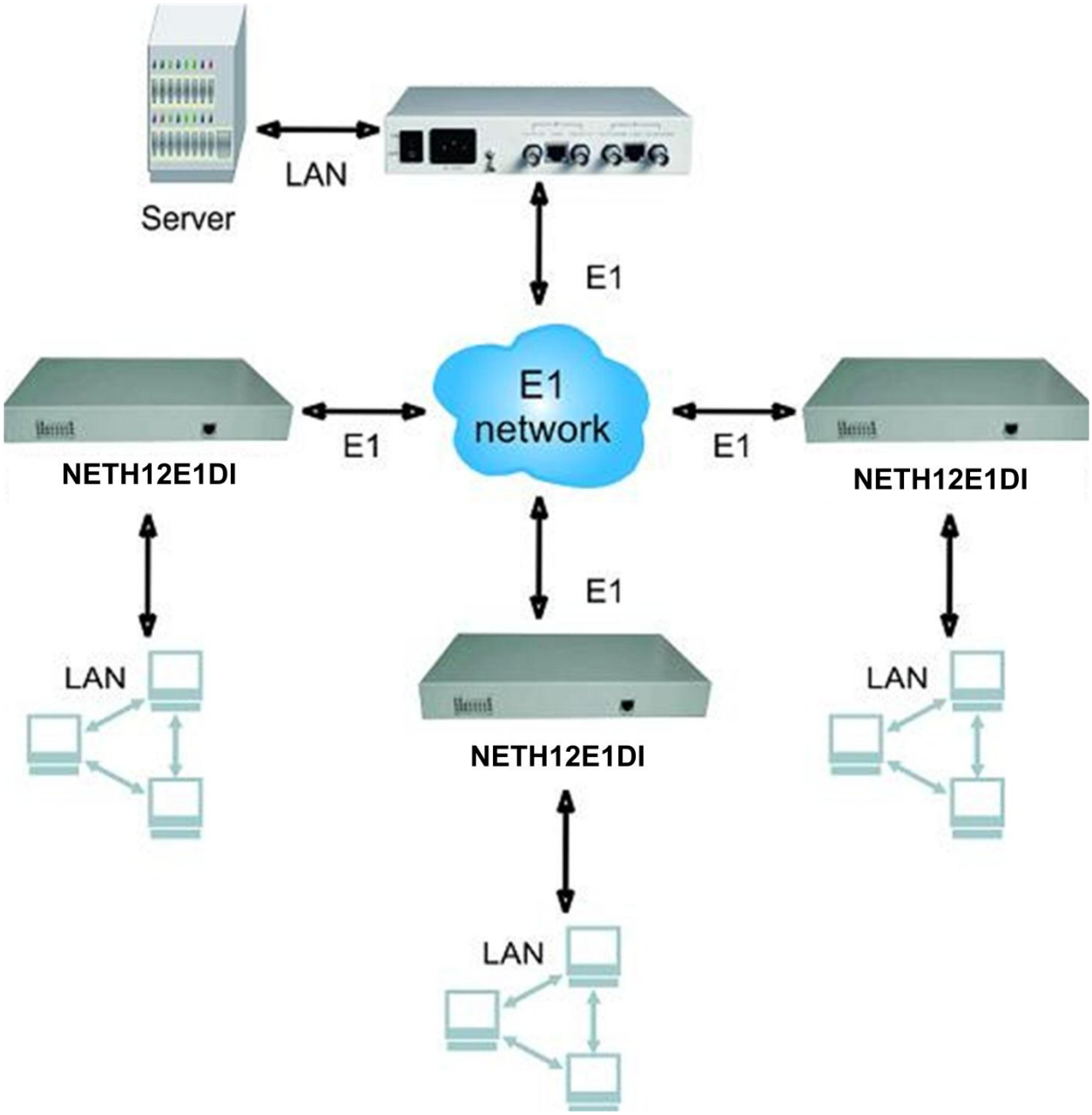


Point to point scenario with multiplexing E1 framed sub E1 and Ethernet into 1 main E1 uplink.



Daisy chain with a central convergence server - each node uses 1 time slot.

Dual channel E1 drop and insert multiplexer with a 10/100BaseT local interface.



Star Configuration central convergence server - each node uses 1 time slot.