

Standards Based Telemetry over IP, TMOIP
High Speed Telemetry transport Ethernet data
transport System Integrated BERT, Diagnostics
and Alarms Configuration via user-friendly WEB
interface SNMP Manageability.

High performance, low latency leader

IPtec specialises in facilitating high performance, low latency services over IP networks. IPtec provides reliable, high quality products for low latency video and telemetry services. These products enable customers to transport high quality video and telemetry signals over IP networks.

High speed Telemetry transmission

The TNP-200 is a telemetry over IP (TMOIP) compliant multiplexer/de-multiplexer system enabling transparent, low latency transfer of very high speed digital telemetry over IP networks. The TNP-200 packetises telemetry data and PCM data and transfers the packets across an IP network. Another TNP-200 is used to reconstruct the telemetry and PCM data to its original state.

The TNP-200 provides IP Network Processing for up to four 50 Mb/s RS-422, ECL, PECL & LVSD digital telemetry signals (clock and data). Each Telemetry data interface may be programmed as an input or output enabling dual channel or full duplex data transmission.

Network Interface

The TNP-200 is equipped with one optical (1/10Gb/s) and two electrical network interfaces, supporting BT-10/100/1000Mbps. Multiple switched Ethernet interfaces provide flexible installation and interconnectivity options.

Diagnostics Tools

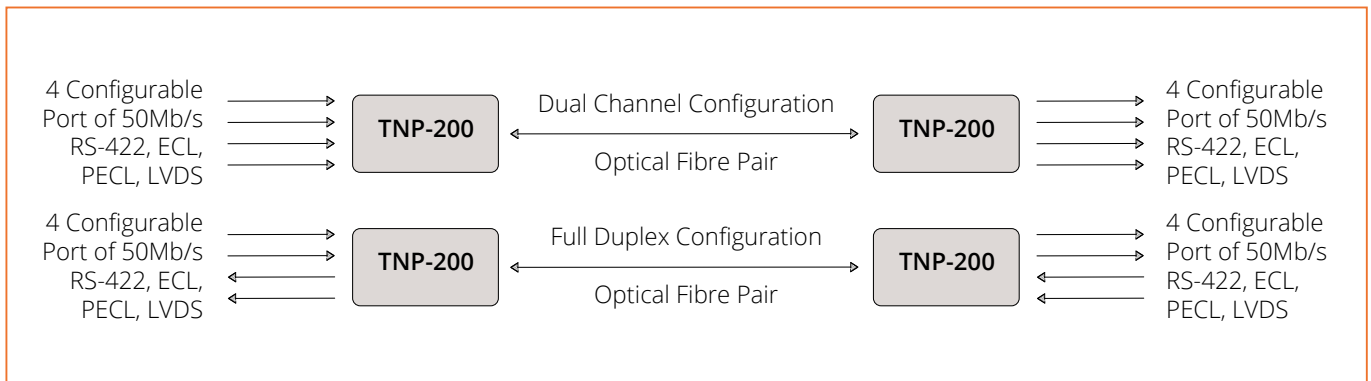
The TNP-200 provides statistics data and diagnostics tools for network installation and troubleshooting. The tools include test pattern generation and Bit Error Rate Testing (BERT).

Superior Performance

The TNP-200 supports individual port timing recovery, using adaptive clock techniques to regenerate source timing information. The user may optimise operation for different networks and applications by configuration. An optional rate independent, flat line response feature guarantees fixed delay on all ports.

Powerful Management

The TNP-200 is remotely manageable via a standard WEB interface and SNMP. Performance monitoring and system configuration capabilities facilitate installation and management in large networks.



Benefits and Features

The TNP-200 enables a flexible solution for high-speed telemetry transmission. The system is user configurable to support one-way transmission as well as full duplex operation. The TNP-200 enables transmission over optical fibre infrastructure as well as standard Ethernet Networks. COTS, SFP, SFP+, short, long, and CWDM wavelength optical transceivers may be used with the TNP-200.

The system supports (one-way) single fibre operation and (two-way) two fibre operation. The built-in Ethernet Switch enables additional aggregation/multiplex capabilities by daisy-chaining of multiple TNP-100/200/300 units allowing for higher fibre utilisation. The TNP-200 enables the user to provide LAN extension services up to 2 x 1Gb/s between the local and remote sites.

Technical Specification

Multi-Function Interface

Number of user configurable inputs/outputs
4 multi-service ports

Telemetry Input/Output (User configurable)

Density: 8 Twinax connectors (Clock & Data),
Format: Balanced RS-422, ECL, PECL & LVDS
Data rate up to 1-50Mb/s.

Remote Management

Built-in Web-based GUI and SNMPv2 and v3

Ethernet Network Interface

One pluggable SFP module.
1000/10000Base-X
CWDM SFP's are also supported.
Two RJ45.10/100/1000Base-T

Physical Dimensions

1RU, ½-width 19". Two units fit in a 19".
(H x W x D) 1.75" x 8.50" x 10.00"
(4.45 x 21.59 x 25.54) cm

Environmental Conditions

Operating Temperature: 0 to 40°C (32F to 104F)
Storage Temperature: -40 to 70°C (-40F to 158F)
Relative Humidity: 5% to 90% (Non Condensing)

Power

100 – 264V AC (47 – 63Hz) < 30W