Sync2IP

2-PORT SYNC TO LAN ADAPTER

FEATURES / BENEFITS

√ **Data Format - transports Sync/Async serial communications over a 10/100 Ethernet network**

√ **Data Rates - 1200 bps to 64 Kbps for simultaneous two-port operation, and up to 128 Kbps for single-port operation**

√ **Serial Data Interface(s) - Up to Two RS-232, RS-422/449, RS-530, V.35, X.21 or TTL**

√ **Control Signals passed in DCE-DTE: RTS, CTS, DCD, DSR and DTR**

√ **LAN Connection - 10/100Base-T Standard RJ-45**

√ **Configure via Ethernet with a Web Browser or Front Panel**

√ **Firmware Upgrades via 10/100 LAN Port**

√ **Easily interface legacy serial devices to Ethernet**

√ **AC or DC Power Supply Option**

√ **1U Rackmount Enclosure**

DESCRIPTION

The Sync2IP is an interface conversion product that transports serial communications over an Ethernet LAN. It converts a full duplex synchronous or asynchronous serial data stream to a UDP/IP packet stream. The serial stream consists of transmit and receive data with selected control signals. Serial Data rates of 1200 bps to 64 Kbps for simultaneous two-port operation, and up to 128 Kbps for single-port operation are available to the user.

Two or more Sync2IP units are required to transparently connect serial devices over the LAN. Data conversion is independent of the serial port protocol.

In the synchronous mode the Sync2IP sends and receives the data bit-for-bit at the synchronous port operating clock rate. Therefore, the interconnected Sync ports must operate at the same nominal clock rate. Guaranteed delivery of Sync data requires error recovery in the customers equipment.

In the asynchronous mode the data is sent on byte boundaries, and when Async flow-control is honored the interconnected Async ports may operate at different speeds. The Async byte format supported is 8 data bits, 1 stop bit, and no parity. Therefore the Async byte frame is 10 bits in length. In Async mode there is guaranteed delivery. Packets will be retransmitted for up to 15 seconds, after which time the "session" will be reset.

The Sync2IP is configured via the HTML Browser interface or front panel LCD display and input buttons. The Sync2IP system firmware upgrades are accomplished via the 10/100 LAN port.

Any combination of DCE and DTE devices may be supported over the peer-to-peer connection between one Sync2IP and the other. However, in Sync mode the Sync2IP does not support a connection of two DCE customer devices.

In the DCE-DCE configuration RTS/CTS flow control is passed through the LAN and exposed as DCD at the peer Sync2IP unit.

In the DCE-DTE configuration RTS, CTS, DCD, DSR, and DTR are passed through the LAN and presented (in time-sequence with the data) as the same (unprocessed) signals to the device connected to the peer Sync2IP.

In the DTE-DTE configuration DCD control is passed through the LAN and exposed as RTS at the peer Sync2IP unit. (Async only)

Xon/Xoff flow control is not processed by either Sync2IP peer. Xon/Xoff are considered data by the Sync2IP and left to the connected user devices to contend with.

The Sync2IP is housed in a sturdy 1U high chassis and has a 90-240VAC power supply or optional -36 to -72VDC power supply. Additionally, an optional 2-up 1U high chassis contains two Sync2IP printed circuit cards for high density applications.

The Sync2IP has a 3-year warranty and a 24 hour turnaround on warranty repairs.

EAST COAST DATACOM, INC.

SPECIFICATIONS

Application
Serial to TCP/IP protocol adapter, to send a full duplex serial data stream over a UDP/IP stream

Capacity
Up to two Serial Sync or Async Ports converted to one 10/100 Base-T LAN Port

Interface
Serial: Async or Sync
LAN: 10/100 Base-T, RJ-45

Data Rates
Serial Data:1200 bps to 64 Kbps for simultaneous two-port operation, and up to 128 Kbps for single-port operation
LAN: 10/100Mbps

Data Format
Data transparent at all data rates

Serial Buffer
2048 bytes

Configuration
Browser Interface or Front Panel LCD and push buttons

User Configuration
Stored in Flash memory

Firmware Upgrades
Upgraded via 10/100 LAN Port

Indicators
System: Green or Yellow
Peer: Green or Yellow
Port 1: Green or Yellow
Port 2: Green or Yellow
Link: Green
Activity: Yellow

Power Source
AC Power Option: 90-120 to 200-240VAC, 50/60Hz, external 110/220 select, IEC Power Inlet DC Power Option: DC Voltage, Input Range of -36 to -72vdc, Current Draw at 48vdc with RS-232: 2-PORT = 90ma @ 4.3watts / 4-Port = 170 ma @ 8.2 watts

Environmental
Lead Free: RoHS Compliant
Operating Temp: 32º to 122º F (0º to 50º C)
Relative Humidity: 5 to 95%Non-Condensing
Altitude: 0 to 10,000 feet

MTBF – Telcordia Issue 1
AC Powered: 371,246 hours
DC Powered: 330,734 hours

Dimensions
Height .... 1.75 inches (4.44 cm)
Width .... 17.00 inches (43.18 cm)
Length .... 9.00inches (22.86 cm)

Weight
4 pounds (1.82 Kg)

Warranty
Three Years, Return To Factory

ORDERING INFORMATION
PPT# 180000
Model: Sync2IP_2
Desc: 2-Port Chassis, Sync / Async to 1-Port LAN Adapter

PT# 180050
Model: Sync2IP_4
Desc: 4-Port Chassis, Sync / Async to 2-Port LAN Adapter

Power Supply Options(1 per chassis)
Part #   Model
180030 AC 110/220VAC
180036 DC -36 to -72VDC Input

Serial Interface Options(Up to 4-per chassis)
Part #   Model
129014 RS-232 DCE I/F Module
129032 RS-232 DTE I/F Module
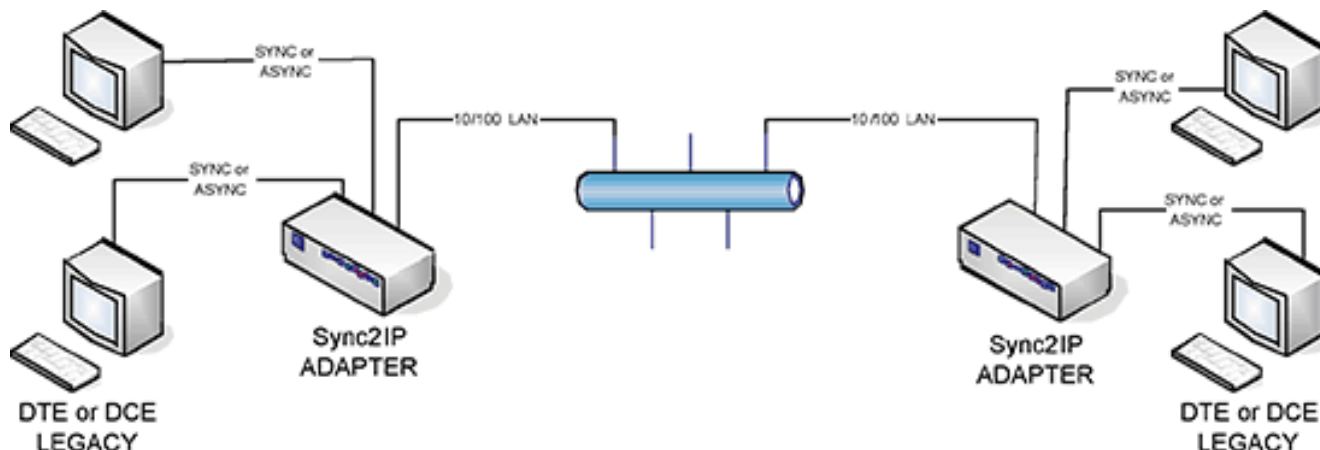129010 V.35 DCE I/F Module
129028 V.35 DTE I/F Module
129011 RS-530 DCE I/F Module
129029 RS-530 DTE I/F Module
129012 RS-422 DCE I/F Module
129030 RS-422 DTE I/F Module

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