



ISU 512

512 kbps ISDN Inverse Multiplexer

Product Features

- Basic inverse multiplexer supports a single high-speed data application rate
- Low-cost inverse multiplexing
- Applications include video conferencing, LAN/WAN connectivity, high-speed file transfer, and T1 backup
- Supports up to four ISDN Basic Rate lines
- Operates at synchronous data rates of up to 512 kbps
- Supports industry standard BONDING
- Dialing options include front panel, stored number, V.25 bis, DTR dialing, and an RS-366 dial interface
- Flash memory for easy upgrades
- Remote configuration over ISDN line or externally
- Compatible with Lucent 5ESS®, Northern Telecom DMS-100™, and National ISDN-1 switches
- Standard five-year warranty

The ADTRAN ISU™ 512 is a standalone ISDN Service Unit that connects data terminal equipment (DTE) to the ISDN network.

The ISU 512 is “specifically designed as a low-cost solution for applications such as video-conferencing, T-1 backup, LAN/WAN connectivity, and high-speed file transfer.

The ISU 512 is designed as a cost effective inverse multiplexer for 384 kbps videoconferencing. Some videoconferencing products operate in a dual port mode. The ISU 512 is designed to operate in a dual port mode making it backward compatible with videoconferencing systems utilizing two Switched 56 DSUs or a dual port ISDN terminal adapter.

The ISU 512 connects directly to the ISDN network using up to four Basic Rate ISDN (BRI) lines. By terminating four BRI circuits, the ISU 512 can create an aggregate bandwidth of up to 512 kbps which can be used to backup a T-1 circuit.

Since ISDN is a switched digital service, bandwidth can be established and utilized on an as needed basis. Therefore, the ISU 512 is well suited for applications where a high bandwidth connection is needed to support bursty or infrequent traffic like medical image or large file transfer.

The ISU 512 may utilize either the V.35 or RS-530 DTE interface and supports synchronous data rates from 56 kbps to 512 kbps. At

rates over 64 kbps, the BONDING Mode 1 inverse multiplexing protocol synchronizes data using from one to eight 64 kbps B channels. By supporting BONDING the ISU 512 interoperates with other BONDING-compatible inverse multiplexers and ISDN terminal adapters.

The ISU 512 can be configured and maintained, locally or remotely, using a VT100 terminal interface. For remote configuration, the unit can be accessed over the ISDN line or externally through the CHAIN IN port on the back panel of the unit.

The front panel of the ISU 512 consists of a two-line by 16 character LCD display, seven LEDs, and a 16-button keypad. This allows for configuring, dialing, testing, and monitoring of the unit without data terminal or test equipment.

Dialing from the unit is accomplished by using the front panel, stored numbers, DTR assertion, or V.25 bis in-band dialing. The RS-366 parallel dial interface is available for applications such as videoconferencing. The ISU 512 also supports dedicated 2B1Q services. This provides a dedicated point-to-point service (as in a limited distance modern or leased line application) with no dialing necessary.



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Printed in the U.S.A.
61202086L1-8F May 2002
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Product Specifications

Network Interface

- Four RJ-45s for ISDN 2B1Q Basic Rate U-Interface or S/T Interface

DTE Interface

- RS-530 or V.35 (both connectors present)
(RS-530 to V.35 adapter cable available)

Dialing Selections

- Manual or automatic stored number dialing
- **In-Band DTE Dialing:** V.25 bis, AT commands
- DTR assertion

Dial Interface

- RS-366 Data Rates (DTE)
- 56 kbps to 512 kbps synchronous Data Rates (Network)
- Up to four BRI's
(Maximum of eight 56/64 kbps B channels)

Protocols

- Clear Channel, BONDING Mode 1 Interoperability
- BONDING-compatible inverse multiplexers, Switched 56 DSUs, ISDN TAs, ISUs

Switch Compatibility

- National ISDN-1, Lucent 5ESS, NTI DMS-100, NEC

Diagnostic and Testing

- Local and remote loopbacks, V.54 loopback, 2047 pattern, Remote configuration

Display

- Two-line x 16-character LCD

Environmental

- **Operating Temperature:** 0° to 50°C, 32° to 122°F
- **Storage Temperature:** -20° to 70°C, -4° to 158°F
- **Relative Humidity:** Up to 95%, non-condensing

Physical

Dimensions

- 2.5" H, 7.875" W, 10.5" D

Weight

- 3 lbs

Power

- 115 vAC, 60 Hz, 8 watts maximum dissipation

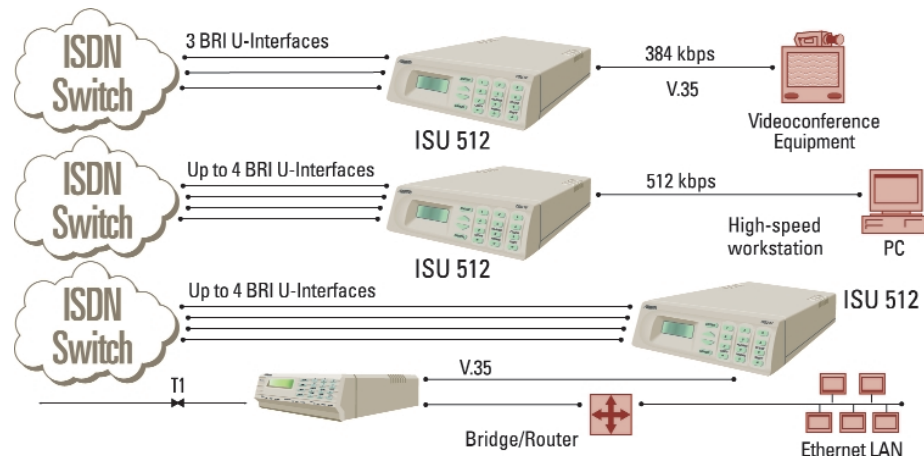
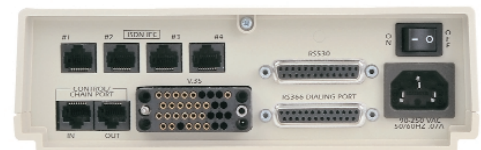
Product Includes

- ISU 512
- Four 7-foot RJ45 telephone cables
- User Manual

Ordering Information

Equipment	Part #
ISDN Ordering Codes are available to aid in ordering ISDN lines for this product	
ISU 512	1202086L1
ISU 512 S/T	1202086L3
RS-530 to V.35 cable*	1200072L1
RS-366 Y cable*	1200120L1
ISU 512 with RE-530 and RS-366 Y cables*	4202086L1
ISU 512 S/T with RE-530 and RS-366 Y cables*	4202086L3

* For 112/128 kbps dual port videoconferencing applications these cables may be necessary



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