

## Two-Pair Fixed-Rate HDSL For CO/Customer Premises



### **LTU-801/802/804 and UTU-801/802/804**

Any member of the WorldDSL LTU/UTU-80x family is software selectable as a communication master or communication slave so that any two units can be used to set up a point-to-point circuit. Any WorldDSL LTU/UTU-80x can be used in a central office. All members of the family are interoperable so that circuits can be easily configured with different interfaces at each end.

The LTU/UTU-80x family can be part of a fully managed system. Using a VT100 compatible terminal or a PC, the units can be managed via their local craft ports or centrally via a management card installed in a CO shelf. ADC's SNMP management software running under Windows may also be used to provision the system, collect alarm and performance data, and conduct diagnostic tests either locally or from a remote management station. In any of these modes, both ends of the circuit can be programmed and managed through the CO, minimizing travel to the customer site.

### **Features:**

- Fiber optic quality (BER  $10^{-10}$ )
- LTUs can provide line powering for up to two doublers for very long reach loops
- LTUs can provide wetting current to reduce corrosion of connections
- Point-to-multipoint configurations where a single central office card can operate two 1 Mbps NTUs each via a single twisted pair to reduce system costs
- User software selectable dataport interface
- Single pair mode where the unit uses only one pair at a maximum rate of 1Mbps
- Timeslot priority mode where, if one of the two HDSL pairs fails, the FAS, signaling and first 15 voice channels are switched to the operating pair
- Downloadable programs from ADC's Web site for easy unit upgrade

## Ordering Information

Catalog No.	Part No.	Line Power/Wetting Current	User Interface
LTU-801*	150-1420-01B*	Provides both	G.703/704 Compliant
LTU-802*	150-1420-02B*	Provides both	V.35/V.36/RS-530/X.21 user software selectable
LTU-804*	150-1420-04B*	Provides both	G.703/704 and V. 35/V.36/RS-530/X.21 ports
UTU-801*	150-1420-31B*	Powered by LTU or locally	G.703/704 Compliant
UTU-802*	150-1420-32B*	Powered by LTU or locally	V.35/V.36/RS-530/X.21 user software selectable
UTU-804*	150-1420-34B*	Powered by LTU or locally	G.703/704 and V. 35/V.36/RS-530/X.21 ports

\*Note: Effective 1 January 2001, if a CE mark is required, add a "C" suffix to the end of the Catalog No. and change the "B" suffix on the Part No. to a "C".

**HDSL Interface**    Line Code: 2B1Q  
 Line Rate: 1168 kbps on each pair  
 Range: see chart at right  
 Connector: DB9F (adapters available)  
 Protection: ITU-T K.20 and K.21 compliant  
 Compliance: ETSI TS101135 and ITU-T G.991.1

**E1 Interface**    Line Code: HDB3  
 Data Rate: 2048 kbps  
 Operation: full or fractional  
 Blocking: per 64 kbps channel  
 Idle Code Insertion: user selectable word  
 Impedance: 120  $\Omega$  balanced or  
                   75  $\Omega$  unbalanced  
 Framing: structured with or without CRC-4  
                   or unstructured  
 Connectors: both D15F (balanced) and  
                   BNC (unbalanced)  
 Timing: G.703 or external  
 Compliance: ITU-T G.703, G.704, G.706, G.821, G.823, CTR12

**Data Interface**    User software selectable as: V.35, V.36, RS-530, X.21  
 Connector: D25F (adapters available)  
 Timing: internal, external, Nx64k, HDSL  
 Compliance: Net 2

**Performance Monitoring**    HDSL: noise margin, pulse attenuation, ES, UAS  
 E1: G.821  
 Alarms: Form C relay contacts  
 Loopbacks: local or remote  
 Test Pattern: PRBS generator and BER meter

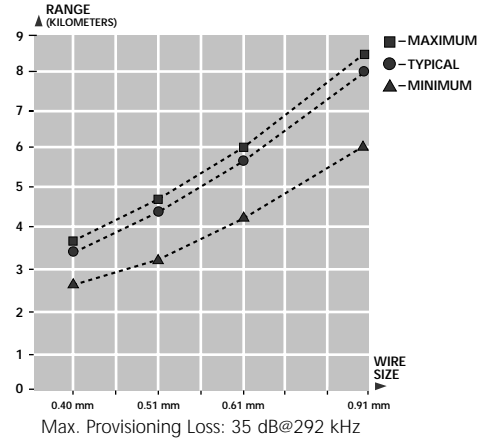
**Power Requirements**    Input Power: -36 to -72VDC  
 Consumption: 5W for LTU or UTU without line powering on; 15W for LTU with line powering on

**Chassis and Enclosures**    EMS-830 or EMS-832 Central Office shelf  
 ERE-811, L2 single slot desktop enclosure

**Environmental**    Operating Temperature: -5°C to +50°C  
 Storage Temperature: -40°C to +85°C  
 Humidity: up to 95% RH non-condensing

**Regulatory**    CE marked  
 Safety: EN60950  
 Emissions and Immunity: EN55022, EN-50081-1, EN-50082-1 (prior to 1 January 2001)  
 EN 300386-2 (after 1 January 2001)

**WorldDSL Rate/Reach Chart**



**Web Site: [www.adc.com](http://www.adc.com)**

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