# LV2000

**Ethernet to EIA-644 LVDS Converter**

datasheet LV2000

- Low-cost LAN extension over EIA-644/LVDS links, crypto or sat modem
- Crypto Auto Resync function
- 10 / 100BaseT auto-negotiating LAN port
- Filtering of local packets
- Efficient HDLC packet handling on WAN port
- EIA-644 LVDS interface at up to 52 Mbps
- Asymmetric operation
- Integral auto-sensing PSU


LV2000

The Metrodata LV2000 is designed to enable the transmission of LAN frames over an EIA-644/LVDS connection. The LV2000 will operate with satellite modems offering LVDS interfaces, providing a low cost alternative to HSSI for operation at up to 52Mbps. The LV2000 will also operate with the latest generation of high speed crypto units which offer LVDS interfaces for operation at up to 52Mbps. The LV2000 offers an automatic transmit crypto resync function that will generate a resync request to the crypto if the LV2000 senses the data stream has lost synchronisation.

The LAN port of the LV2000 is a 10/100BaseT auto-sensing interface supporting an auto crossover connection and presented on an RJ45 connector. The unit's operating mode is configured by setting bit-switches mounted on its base.

The LV2000 LVDS interface is presented as DTE and will operate at data rates up to 52Mbps maximum. The LV2000 will operate in a standard bi-directional, symmetric mode as well as uni-directional or asymmetric applications. The LVDS port complies with the electrical specification EIA-644.

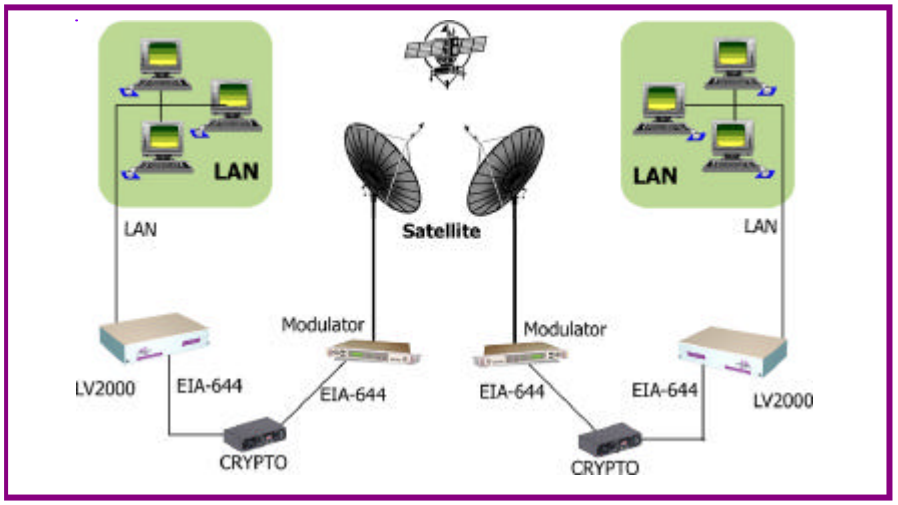
To give maximum flexibility for connection to crypto units, the resync request signal may be active high or active low, and be presented as a balanced LVDS or unbalanced LVTTL signal.



Metrodata Ltd, Fortune House, Crabtree Office Village, Eversley Way, Egham, Surrey, TW20 8RY, UK
Tel: +44(0)1784 744700 Fax: +44(0)1784 744730 email: sales@metrodata.co.uk website: www.metrodata.co.uk

LV2000 datasheet

## Application Diagram




## Specifications

| Subscriber Port | |
|---|---|
| Presentation | 10/100BaseTX, RJ45, Auto-MDI/MDIX |
| LED support | Link / Activity & Speed |
| Operating mode | Auto-negotiate 10/100, Full or Half duplex |
| Port filtering rate | 148810 packets per sec |
| MAC address table | 4096 entries |
| Packet size | 64 bytes minimum |
| | 1536 bytes maximum |
| **WAN Port (Satellite modem)** | **LVDS Up to 52 Mbps** |
| Presentation | 25 way D-type Male |
| Frame mode | Unframed |
| Timing | DCE supplied |
| Encapsulation | HDLC |
| LEDs | Tx / Rx packet |
| Compliance | EIA- 644 |

| Power supply | |
|---|---|
| -48VDC Supply | -40 to -72 VDC, 165 - 95 mA |
| AC Mains | 100-250 VAC, 50-400 Hz, |
| | 65 - 28 mA, IEC connector |
| Power Consumption | 6.5 watts approx when operating |
| **Compliance & Approvals** | |
| Safety | EN41003, EN 60950 |
| EMC | EN55022, EN50082 |
| **Environment** | |
| Storage Temp | -20 to +70 deg C |
| Operating Temp | 0 - 50 deg C |
| Humidity | 0-95% , non-condensing |
| Pressure | 86-106 KPa |
| **Packaging** | |
| Type | Modem, 1U high without feet |
| Dimensions | (W x Dx H mm) |
| Rackmount | 202 x 132 x 44 (without feet) |
| Tabletop | 202 x 132 x 48 (with feet) |

## Part numbers

| | | | | |
|---|---|---|---|---|
| **LV2000 Order codes** | **100-250 VAC** | 80-05-558 | **-48 VDC** | 80-21-558 |

## About Metrodata

Founded in 1989 and based near London's Heathrow airport, Metrodata is a leading designer and manufacturer of datacoms hardware for Fixed line, Satellite, Enterprise and Carrier networks. Specialising in interoperability and interconnectivity, Metrodata offers a range of Standard, Niche and System Integrated type products. These include Media converters, Interface converters, Fibre converters, Ethernet extenders and ATM switching and Circuit emulation products. Other specialist products manage high data rates and clock sensitive applications to ensure higher network performance. Metrodata provides COTS products to the commercial, government and defence sectors, as well as developing turnkey products to specific customer requirements. For more information and data on Metrodata products, visit our web site at www.metrodata.co.uk

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