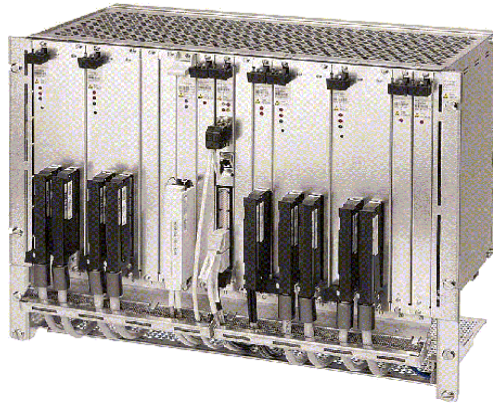




RFL Communications plc

## PRODUCT INFORMATION

### UMUX 1500/1200 Multi-Service Platform



#### Key Benefits

- Combines access/cross connect and PDH/SDH functionality in a single platform
- Cross-connect capacity: 128x2.048Mbit/s with granularity options for 64Kbit/s & nx64Kbit/s
- Flexibility of installation
- Ease of operation and maintenance
- Street cabinet or indoor rack mount, 19" or ETSI practice
- Compact UMUX1200 can be wall mount, floor mount or rack mount

#### Key Features

- Fully ETSI/ITU compliant
- Modular 19" sub-rack arrangement
- Integrates both legacy voice and data services to advanced high speed services such as fast LAN/ATM/HDSL
- Configurable for SDH or PDH ADM and TE applications
- Local/remote Windows NMS seamlessly manages all aspects (transmission/cross-connect/access)
- Low fill option satisfied by UMUX 1200 platform

The UMUX1500 combines multi-service access for voice, data and video applications; multiplexing/cross connect functionality and connection to copper, fibre and radio backbone infrastructures, within a single high performance platform.

This approach satisfies the requirements of all legacy telecommunication and datacom systems whilst addressing the needs of new high bandwidth services such as fast Ethernet, ATM and HDSL.

A key benefit includes a single network management system controlling all functions and providing both remote and local access to all networked nodes.

At the transmission level the UMUX can be configured as either an ADM or TE node with connection options for 8Mbit/s PDH or 155Mbit/s SDH interfaces.

## Technical Data – Sub-Rack Options

<b>Main Characteristics</b>	UMUX 1500	21 Slot, 19" rack Cross connect capacity: 128x2Mbit/s Granularity: 64 kbit/s, nx64 kbit/s, 2Mbit/s
	UMUX 1200	8 Slot, wall mounted or 19" rack Cross connect capacity: 48x2Mbit/s
<b>Management Facility</b>	UCST UNEM	Element manager; local or remote configuration Network manager with user friendly, element and network graphical display

## Technical Data – Transmission Element

<b>STM-1 155Mbit/s SYNIO 165 Optical Interface Unit</b>	Class 1 laser ALS according to ITU-T G.958	1+1 unidirectional and bi-directional MSP (Multiplex Section Protection) Short haul optics – Typical 45Km Long haul optics – Typical 100km +
<b>8448 kbit/s Electrical/ Optical Interface:</b>	Bit rate transmission code  Optical transmission	8Mbit/s  Mono-mode/Multimode Typical distance 45km
<b>HDSL, S-HDSL Interface:</b>	Usable bit rate/service  Line bit rates Line code Transmission range Interface to digital network	2 Mbit/s; nx64 kbit/s; fract. E1 or nx64 kbit/s  1x2320 kbit/s 2x1168 kbit/s CAP / 2B1Q / PAM16 Up to 16 km G.703; G.703/G.704; V.3 (ISDN PRA); X.21/V.11
<b>MSDSL Interface: LEMU6, LEMQ6 Unit</b>	Bridging  IP routing Frame relay Transmission range Number of MSDSL interfaces per unit LAN interface	Transparent MAC bridge (standard mode) Star bridge mode; Port based virtual LAN  Static IP routing; OSPF V2 dynamic IP routing Frame Relay Termination (FRAD) or switching Up to 29 km 6 10BaseT (full duplex)
<b>ISDL Interface: SULIC Unit</b>	Transmission code  Number of interfaces per unit Transmission range Interface to digital network	2B1Q; ISDN BA Uo Interface (ANSI T1.601-1992)  8 Up to 11.5 km V.24/V.28, X.21/V.11, V.35

## Technical data – Channel Cards

<b>Asynchronous Data</b>		
<b>Synchronous Data 64Kbit/s and nx64Kbit/s:</b>	X.21/G.703	
<b>2 Mbit/s Electrical Interface: LOMIF, LOM14 unit</b>	ITU-T recommendations	G.703, G823 2048Kbit/s 75/120 Ohm 8 x interfaces per module
<b>10 BaseT Interface: LAWA4 Unit</b>	Bridging  IP routing Frame relay WAN interface LAN interface	Transparent MAC bridge (standard mode) Star bridge mode; Port based virtual LAN  Static IP routing; OSPF V2 dynamic IP routing Frame Relay Switching PPP, Frame Relay; 2x2Mbit/s, nx64 kbit/s, transp. 10BaseT (full duplex)
<b>Voice</b>	4-wire 4-wire E&M 2-wire FXO 2-wire FXS	

## Environmental

### Physical Specifications

#### UMUX1500

Height	308.2mm (with front cover in place)
Width	482.6mm with brackets for 19" cubicle mounting
Depth	283mm (with cover in place)

#### UMUX1200

Height	176.1mm
Width	482.6mm
Depth	282.1mm (with front cover in place)

### Environmental Specifications

Operating temperature	-5°C to +45°C
Storage temperature	-25°C to +55°C
Humidity	Class 1.2

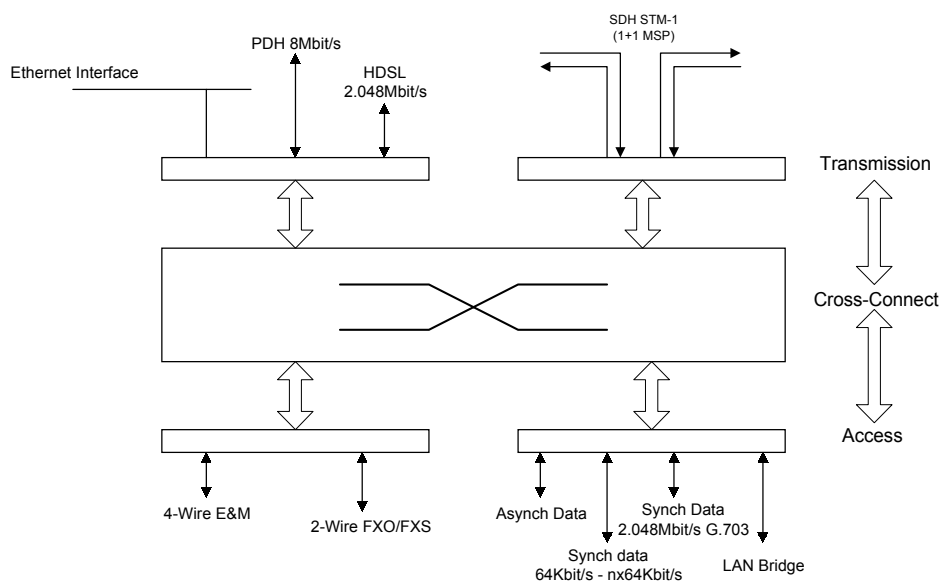
### Compliance

EMC	89/336/EEC Electromagnetic Compatibility
	73/23/EEC Safety of low voltage equipment
	1999/5/EC radio equipment/telecom terminal equipment EN 300/386 V1.2.1 (2000-03)
	EN 6095: 1992 plus amendments A1-4 and A11

### Power Specification

UMUX1500	-38.5 to -75Vdc
UMUX1200	-38.5 to -75Vdc/ 115VAC/230VAC

## UMUX System Architecture



# Fax Back Information Request Form

+44 (0) 1249 446506

Please send information/call

**Company:** \_\_\_\_\_

**Address:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Contact:** \_\_\_\_\_

**Position:** \_\_\_\_\_

**Telephone:** \_\_\_\_\_

**Fax:** \_\_\_\_\_

**Email:** \_\_\_\_\_

## Information Required

### Product

### Please Tick

Video Transmission Products	
Multiplexers	
Power Line Carrier	
Protection Signalling	
LAN Products	
Substation Network Gateway/Protocol Translation	

### Systems

Voice/Data Communication Systems	
LAN Infrastructures	
Video/Surveillance Schemes	

### Engineering Services

Installation/Commissioning	
Maintenance	
Training Course	