

## IMUX 2000 T1/E1 Multiplexer with common logic redundancy

By RFL Electronics

Catalog # [IMUX\\_2000\\_T1/E1\\_MUX](#)



The unit provides full featured, Drop-and-Insert capability for each voice frequency circuit or any signal that can be transmitted in a DSO channel. The multiplexer has electrical and a wide variety of optical fiber (both singlemode and multimode) interfaces to simplify system configuration. Channel cards are available for voice, data, telemetry, teleprotection, video and ethernet applications. When combined with our IMUX 2000 8-Port DACS-R, the IMUX 2000 T1/E1 Multiplexer supports many types of network layouts such as Spur, Hot Standby and Ring topologies. It is both hardware and software configurable. The unit offers the ultimate network management system. It operates in a Windows™ point-and-click environment and provides network visibility from any node which allows for remote provisioning, monitoring and alarm reporting. The IMUX 2000 T1/E1 Multiplexer is compact, modular in design and compatible with previous generations of RFL Multiplexers. For a product that meets and exceeds your telecommunication needs, advance into this new class of hardened multiplexer and make the Intelligent choice, the IMUX 2000 Intelligent T1/E1 Multiplexer

### Features

- Substation Hardened-The IMUX 2000 T1/E1 Multiplexer is designed for harsh environments and has a wide temperature range of -20°C to +65°C (-4°F to +149°F). It meets the IEEE/ANSI standards C.37.90-1989, C.37.90.1 and C.37.90.2 for SWC, fast transient and EMI. It is CE approved and has been tested to BS EN5002:1995. It is also FCC part 15 Class A approved
- Reliability- The IMUX 2000 provides enhanced reliability by offering optional redundant power supplies and common logic modules
- Speed-The IMUX 2000 is designed to handle time sensitive applications such as Protective Relaying. The Drop-and-Insert through-channel delay is less than 25 microseconds. It has an average reframe time of <25 ms and also has the ability to enable a Fast Reframing Channel (FRC) for <1 ms reframing
- DSO Squelching-The IMUX 2000 T1/E1 Multiplexer has the ability to squelch (turn off) the output of a channel module in the Multiplexer upon loss of synchronization. This feature provides security against false tripping on 4-wire analog transfer trip channels and older digital equipment (with limited error checking) during loss of sync and protects against 'pink' noise conditions, which result from cross-talk or the frame search. This feature is ideal for preventing false tripping due to system malfunction

- Designed specifically for the unique need of the harsh substation environments, the IMUX 2000 T1/E1 Multiplexer incorporates special design characteristics which allow it to meet ANSI / IEEE / IEC standards for operation in harsh environments (RFI, SWC, EMI and Fast Transient)
- The features in the IMUX 2000 T1/E1 Multiplexer, address the critical time issues associated with protective relaying, making it ideal to be used in the electric power utilities industry
- The multiplexer has the Transfer Trip and Current differential interfaces required for the utility market. Applications for the product include in the transportation industry includes roadside signal acquisition and transmission from vehicle loop detectors, compressed digital video, camera control, toll collection, status and alarm reporting, tunnel ventilation control, and voice and data traffic signal control systems.

### General

#### Alarm Type

Alert, cautionary conditions that do not prevent multiplexer operation. Alarm, conditions that directly affect multiplexer operation, Status monitoring: Constant monitoring of equipment with alarm reporting.

### Application

Application - For Use On	Electric Power Utilities, Transportation Industry	<ul style="list-style-type: none"> <li>• 48/125 VDC</li> <li>• 250 VDC</li> <li>• 120 VAC</li> <li>• 220 VAC</li> </ul>
Catalog Number	IMUX_2000_T1/E1_MUX	
Humidity	0-95% Non-condensing	
Interface	Front panel indicators and alphanumeric display RS-232 port for remote access and interrogation Form C relays for shelf alarm and alert	Input Voltage Range 19 to 29 VDC, 38 to 150 VDC, 200 to 300 VDC, 90 to 130 VAC, 180 to 265 VAC
Operating Temperature Celcius Max	+65°C	
Operating Temperature Celcius Min	-20°C	
Power Supply	75 Watts	
<b>Dimensions</b>		
Cubic Capacity	1446.375 cu.in	
Depth	14.5 in	
Height	5.25 in	
Weight	15 lb	
WeightMetric	6.8 kg	
Width	19 in	
<b>Electrical Ratings</b>		
Input Voltage	<ul style="list-style-type: none"> <li>• 24 VDC</li> </ul>	
<b>Certifications And Compliance</b>		
Compliance	FCC Part 15 class A	
Industry Standard(s)	<ul style="list-style-type: none"> <li>• ANSI C.37.90-1989 &amp; ANSI C.37.90.1. EIC 1000-4-2:1995</li> <li>• IEC 1000-4-3:1997</li> <li>• IEC 1000-4-4:1995</li> <li>• IEC 1000-4- 6:1996</li> <li>• IEC 1000-4-8:1994</li> <li>• DD ENV 50204:1996</li> <li>• IEC 255-21-2</li> <li>• IEC 255-21-1</li> <li>• ANSI C.37.90.2</li> </ul>	
<b>Product Assets</b>		
<a href="#">Brochures - IMUX 2000 T1/E1 Multiplexer with Common Logic Redundancy</a> <a href="#">Specifications - IMUX_2000_T1E1_MUX</a>		