



**SKU:** 0101-0045

**Category:** Cards/Units

## Expansion Link Unit 3 (ELU-3)

The Expansion Link Unit 3 (ELU-3) plug-in card provides the system connection from the primary shelf to each expansion shelf in a Tellabs 1000 Multi-Service Access Platform Series terminal. The ELU-3 provides a dedicated broadband communication link to the expansion shelf via a fiber-optic connection to an EBC-3 card. The ELU-3 card manages communication between the primary and secondary shelf, transmitting system commands from the CPU-3 and relaying information to and from the EBC-3 card. The ELU-3 provides both ATM, Ethernet and TDM transmission between the primary CBA backplane and the expansion shelf.

## Features

- Enables simple system expansion and control for expansion shelves
- Supports transport of ATM, Ethernet and TDM traffic between shelves
- Communications gateway between the CPU-3 and the expansion shelves
- Dual memory support for non-service affecting programming
- Ability to recover timing reference from the expansion shelf and provide it to the primary shelf
- Provides composite clock P-Bits and N-Bits to the expansion shelf for DDS timing in the expansion shelf

## Highlights

### Scalability

Grow the Tellabs Multi-Service Access Platform with multiple expansion shelves over time while supporting ATM, Ethernet and TDM connectivity. The primary shelf can support up to seven broadband expansion shelves (served from up to 14 redundant ELU-3 card pairs).

### High Reliability

Install a minimum of one EBC-3 and ELU-3 cards plug-in card in the expansion shelf and primary shelf. For redundancy, install an additional EBC-3 and ELU-3 cards for high network availability configurations.

### Fiber Connectivity

The EBC-3 and ELU-3 cards link via a fiber-optic connection. The expansion bank fibers (EBFs) transport the TDM and ATM data on separate multimode plastic fiber pairs that terminate directly to the EBC-3 and ELU-3 cards. The EBF fiber connection carrying ATM traffic between the ELU-3 and the EBC-3 operates at 155 Mbps to ensure full, non-blocking access to the transmission facility regardless of the plug-in card types used in the expansion shelf.

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## Specifications

### Physical

- Height: 5.125 in (13.018 cm)
- Width: 0.563 in (1.429 cm)
- Depth: 10.5 in (26.67 cm)

- Weight:0.5 lb (0.23 kg)

### Interfaces

- Transmission rate:155 Mbps (ATM) + 49.125 Mbps (TDM)
- Transmitter:LED
- Receiver:PIN Photodiode
- Coding:NRZI
- Fiber type:Multimode plastic
- Connector type:HP “Versa-Link”

### Power Consumption

- Maximum power consumption:5.45 W
- Typical power consumption:5.0 W

### Environmentals

- Temperature:-40° to +149° F (-40° to +65° C)
- Relative Humidity:5-95% noncondensing
- Altitude:Up to 10,000 feet

### Compliance

- Jitter tolerance:T-1/E-1 1.2/88-OMR, ANSI
- Office composite clock:TA-TSY-000378 Telcordia (Bellcore)
- Synchronization:TA-NPL-000436 Telcordia (Bellcore)

### LED Indicators

- FAIL (red)
- ACTV (green)
- SYNC (green)

### Management

- Craft User Interface (CUI)
- Tellabs Panorama Element Management System (EMS)

### Software Support

- Minimum base software FP16 and higher

### Installations

- Supported in Tellabs 1000 CBA

### Ordering Information

- ELU-3: 0101-0045