Optical Transmission ELink Platform

Description

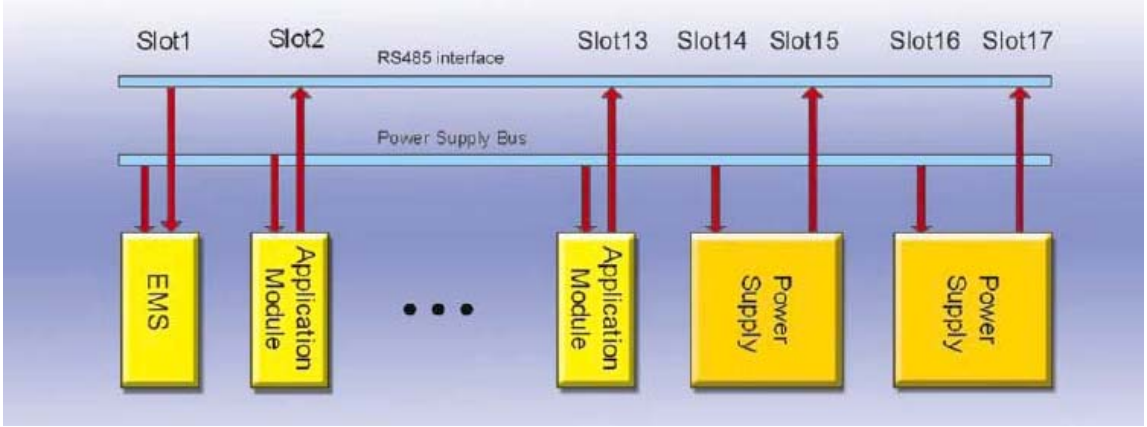
The ELink is a high performance broadband optical headend platform that consists of a series of modules with hot-swap capability. It features a compact structure, high density modular design, high reliability and high performance a simple, fast and flexible way to setup and -price ratio. This provides network operators update the system to meet emerging broadband network requirements.

The ELink platform is housed in a standard 19-inch chassis and is 3 rack units high, with 17 slots for active modules. It can accommodate one power supply and up to 15 application modules or 2 power supplies (with power sharing capability) and up to 13 application modules. ELink series modules includes forward transmitter and receiver modules, return receiver module (standard or RFoG), optical amplifier and a network management module.

Features

- Ultra high density modular design
- Up to 16 (regular) / 32 (double) modules per chassis
- Hot-swap design for all modules
- Redundant power supply option
- Low power consumption
- Superior heat dissipation and air circulation
- Advanced SNMP network management over Ethernet.
- Advanced management module with touch panel design

Block Diagram



Chassis and Plug-in Module Options

EL-FRX Module 	The EL-FRX Forward Path Receiver accepts two optical inputs for redundancy with a wavelength between 1200 and 1600nm and an optical power input range of –3 to +3dBm. The RF output has a pass-band from 54 to 1003MHz and can be attenuated between –20 and 0dB using the front panel controls.
EL-FTX2 Module 	The EL-FTX2 series is a high performance 1310nm DFB laser transmitter module and is ideal for broadcast and narrowcast applications. The modules can provide a wide range of optical output power to deliver both analog and digital signals. High performance, advanced pre-distortion circuitry achieves superior CSO and CTB. All configuration parameters can be monitored by LEDs on the front panel, or by the EL-EMS3 management module. The EL-FTX2 module can be operate in AGC or MGC modes. These modes can be set up on the front panel.
EL-FTX-DU Module 	The EL-FTX-DU-1310 is a 1310nm forward transmitter module. With its ultra-slim design, 2 modules can fit into one EL-CH slot. This module is compatible with other modules of E-link Electroline series to integrate into the same E-link Chassis and provides a 50% reduction in the number of physical devices needed to greatly save room space. The module contains a high performance, advanced pre-distortion circuitry and achieves superior CSO and CTB, ideal for broadcast and narrowcast applications. All configuration parameters of modules can be monitored via EL-EMS3 equipment management module.
EL-RRX2 Module 	The EL-RRX2 is a CATV Return Path Receiver Module with four optical inputs. The module uses a low noise PIN diodes and a high output level RF amplifiers. The module features four independent RF output ports that are located on the rear panel and provides up to 45dBmV output level. Monitoring and configuration setting of the receiver module are all achieved via the front panel and EL-EMS3 equipment management module it is available in STANDARD or RFoG version.
EL-RRX-DU Module 	The EL-RRX-DU is a CATV Return Path Receiver Module with four optical inputs with ultra-slim design, 2 modules can fit into one EL-CH slot. This module is compatible with other modules of E-link Electroline series to integrate into the same E-link Chassis and provides a 50% reduction in the number of physical devices needed to greatly save room space. The module has a built in low noise PIN diode and a high output level RF amplifier, features four independent RF output ports, which are located on the rear panel of the receiver module, providing up to 45dBmV output level. Monitoring and configuration setting of the receiver module are all achieved via the EL-EMS3 equipment management module.
EL-EMS3 Module 	The EL-EMS3 Equipment Management Module provides control and monitoring of all Elink modules. El-EMS3 has built in flip-out LCD screen for easy local access and control. EL-EMS3 also have a USB port for local craft access and an Ethernet port for remote access SNMP and WEB access. The embedded SNMP agent supports standardized SCTE-HMS-MIBs objects.
EL-FA3 Module 	The EL-FA3 series of fiber amplifier module provides optical signal amplification for high performance networks providing voice, video and data services. It contains a high reliability single or double pump laser, has a low noise figure and is available with output options ranging from 14 to 23 dBm. An embedded master control unit (MCU) monitors status of critical components, measures values of key parameters, controls certain function within the unit and report this information via front panel display and over an SNMP network interface.
EL-PS Module 	The EL-PS power supply module is designed to provide stable powering for all modules in the chassis. Two EL-PS modules can be used in one Elink platform for redundancy with built-in power sharing circuitry. The auto-recovery short circuit protection function maximizes the reliability of the platform. On the front panel, the LEDs indicate module status and DC voltage output status. EL-PS also provides 24 VDC test point for testing output voltage

Notes: Detailed module specifications are available on request by contacting your Electroline representative. Specifications are subject to change without notice.

For more information on our products, please visit: www.electroline.com or call: 800-461-3344