

## Features and Benefits

*The LaserPlus Model LP-CH-16 Chassis fits into a 19-inch EIA rack, and holds up to 15 interchangeable, hot-swappable, plug-in application modules. Each chassis requires one power supply & accepts a 2nd for hot redundant backup, & has provisions for both local monitoring & remote SNMP monitoring. NOTE: The power supply is NOT Hot Swappable.*

The chassis is very compact, occupying only 5.25" (3 RU) of rack space. Universal slots accept almost any "mix-and-match" combination of Olson Technology, Inc. LaserPlus Model LP-x transmitter, receiver, EDFA, block downconverter, L-Band transmitters and receivers, passive optical coupler or WDM application modules, to accommodate a limitless variety of service delivery architectures and provide flexibility and scalability in headend/hub design and zone arrangements. It also includes an integrated internal fiber management tray. The connecting optical fiber(s) can enter the chassis from the front, or from fiber routing apertures located on either (or both) sides of the chassis. Once the fiber connection is made, the fiber cable can be secured in an integrated fiber management tray, located above the application modules. Drop slots are conveniently placed along the tray to assure minimum fiber clutter in front of the modules. The application modules slide into the chassis from the front of the rack, and all RF coaxial cables are connected at the rear. A single AC or DC power supply module plugged into the primary power supply slot# 16 is sufficient to power a fully loaded Laser Plus chassis; two power supplies (in slots# 15 & 16) may be used to provide hot-redundant backup. For maximum failsafe protection, an AC module can be used in combination with a DC module to provide simultaneous AC and DC powering to the Laser Plus chassis.

**NOTE: The power supply is NOT Hot Swappable.**

Optimized design assures a "worst-case" fully-loaded chassis power requirement of less than 150 Watts, ensuring thermal efficiency, low operating costs and long-term reliability. Additionally, the unit is cooled by four (4) high reliability fans mounted on a plenum located on the rear of the chassis, for enhanced air circulation, increased heat dissipation and significantly better reliability than module-based fans. The fans are easily accessible for hot-swappable user-replacement, should that ever be required. No additional spacing is required between chassis units, permitting even more efficient use of precious head end or hub rack space.

In addition to front panel LEDs on the various applications and power supply modules for local status (power, laser, cooling, major/minor alarm, etc.), the Laser Plus chassis is also provisioned with a rear-mounted DB-25 connector which outputs individual application module summary alarms via contact closures for local status monitoring or for porting into another monitoring and control system of the system operator's choosing. Remote monitoring can be provided via the 25pin D-sub connector on the back of the chassis.



## Specifications

ELECTRICAL, ENVIRONMENTAL & MECHANICAL PARAMETERS:	
Dimensions	5.25" H x 19" W x 14.5" D (13.3 cm x 48.3 cm x 36.8 cm)
Weight (Empty)	10 lb. (4.54 kg)
Operating Temperature Range	0 degrees C to +50 degrees C (+32 to +122 degrees F) <i>(Air temperature measured at air inlet of <b>Model LP-CH-16</b> chassis)</i>
Humidity Range	to 95% non-condensing <i>[Recommended for use only in non-condensing environments]</i>
Cooling	4 Fans plenum-mounted; user-replaceable ( <b>PN# 037-000405</b> )
Module Slots	1-14=application modules; 15=apps or PS; 16=power supply
Powering	5.25VDC per module; 90-264 VAC or -48VDC; < 150 Watts <i>[Requires use of 1 or 2 <b>Model LP-PS-x</b> power supply module(s)]</i>
CHASSIS INTERFACES:	
Local Status Alarms	Connector: DB-25 Electrical Interface: Relay Contact Closure: 100mA @ 25VDC <i>[Provides ground closures on alarm: PINS 1-15 = SLOTS 1-15; PIN 17 = Cooling; PIN 24 = Summary; PIN 25 = GND]</i>
SNMP Agent(Optional) Connector: RJ-45	Electrical Interface: 10 Base T Ethernet <i>[Requires <b>Model LP-CH-SNMP-1</b> element management agent]</i>



## HIGH DENSITY COMPACT CATV OPTICAL TRANSMISSION SYSTEM AC Power Supply Module (LP-PS-AC)

### Features and Benefits

- Automatic sensing of input AC voltage (90-264 VAC) for ease-of-installation
- IEC power connector ensures worldwide power cord availability
- Each chassis requires one power supply to provide +5 VDC to application modules
- Each chassis accepts a second optional power supply for hot failsafe backup
- Mix-and-match AC and/or DC modules in the same chassis for maximum redundancy
- Power supplies are fully isolated, eliminating single source of power failure
- Front Panel status LEDs: Power, Chassis Temperature, Summary Alarm for modules
- Single-slot width, plug-in, front-access design features hot-swap module capability
- Chassis-based plenum with four large fans creates more airflow & better reliability than module-based fans; if fan failure occurs, power supply remains in operation

### Specifications

ELECTRICAL, ENVIRONMENTAL & MECHANICAL PARAMETERS:	
Dimensions	4.5" H x 1.125" W x 8.75" D (11.4 cm x 2.9 cm x 22.2 cm)
Weight (Empty)	1lb. (.454 kg)
Operating Temperature Range	0 degrees C to +50 degrees C (+32 to +122 degrees F) (Air temperature measured at air inlet of <b>Model LP-CH</b> chassis)
Humidity Range	to 95% non-condensing (Recommended for use only in non-condensing environments)
Mounting	<b>Model LP-CH-16 LaserPlus</b> Chassis
Module Slots	One slot width: #16=power supply; #15=apps or redundant PS
Powering	Output: 5.25VDC per applications module @ 21A max; Input: Universal 90-264 VAC @ 47-63 Hz < 150 Watts
Protection	3AG 250V 3.25A SB fuse[Littelfuse PN# 31303.2]
POWER SUPPLY INTERFACES:	
Input Connector	<b>Model LP-PS:</b> IEC power connector
Status Interface	(Functions Monitored) DC Voltages, Internal temperature LED Indicators (Green/Red) Voltage Presence; Temperature Alarm; Slots 1-16 Summary Alarm



## Features and Benefits

- DC (48 VDC) power supply module to provide +5 VDC to application modules
- Each chassis requires one power supply to power one fully-loaded chassis
- Each chassis accepts a second optional power supply for hot failsafe backup
- Mix-and-match DC and AC modules in the same chassis for maximum redundancy
- Power supplies are fully isolated, eliminating single source of power failure
- Front Panel status LEDs: Power, Chassis Temperature, Summary Alarm for modules
- Single-slot width, plug-in, front-access design features hot-swap module capability
- Chassis-based plenum with four large fans creates more airflow & better reliability than
- module-based fans; if fan failure occurs, power supply remains in operation

## Specifications

ELECTRICAL, ENVIRONMENTAL & MECHANICAL PARAMETERS:	
Dimensions	4.5" H x 1.125" W x 8.75" D (11.4 cm x 2.9 cm x 22.2 cm)
Weight (Empty)	1lb. (.454 kg)
Operating Temperature Range	0 degrees C to +50 degrees C (+32 to +122 degrees F) (Air temperature measured at air inlet of <b>Model LP-CH-16</b> chassis)
Humidity Range	to 95% non-condensing (Recommended for use only in non-condensing environments)
Mounting	<b>Model LP-CH-16 LaserPlus</b> Chassis
Module Slots	One slot width: #16=power supply; #15=apps or redundant PS
Powering	Output: 5.25VDC per applications module @ 21A max; Input: +/-48VDC (36VDC to 75VDC isolated) < 150 Watts
Protection	QTY 2: 8A 250V 5x20mm fuse [Littelfuse PN# 217.008]
POWER SUPPLY INTERFACES:	
Input Connector	3-wire Molex connector
Status Interface	(Functions Monitored) DC Voltages, Internal temperature LED Indicators (Green/Red) Voltage Presence; Temperature Alarm; Slots 1-16 Summary Alarm

