Headend Optics Platform (CH3000)

PS3148
–48 VDC Power Supply

FEATURES

- 250 Watts
- Two models available:
  - Alphanumeric display (D version)
  - Status LEDs (N version)
- −36 to −60 VDC input
- Over temperature protection
- Hot swappable load-sharing functionality
- Occupies two full-depth slots
- Supports setup, monitoring and control of chassis-resident active modules via SNMP serial port
- Monitors and detects chassis platform alarms
- PS3148D version enables local monitoring and control without additional hardware

PRODUCT OVERVIEW

The model PS3148 is a high performance, 250 Watt power supply and controller for the model CH3000 chassis. The PS3148 accepts a nominal DC input voltage from −36 to −60 volts, and outputs 12 volts DC to the power bus of the CH3000 mid-plane. Features include hot swap capability, load sharing for redundant operation, overvoltage, short circuit protection, and over temperature protection.
The PS3148 is available in two configurations, the model PS3148D with alphanumeric display and the model PS3148N without display. The PS3148 dual-width module occupies two full-depth chassis slots and ships with a model BP-P2 dynamic back plate.

The PS3148 functions as the chassis controller and permits the network operator to set alarm parameters for key functions of all active modules, to read status of these key functions and to query alarms. On the model PS3148D, these functions are accomplished with a front panel alphanumeric display and control switch or via a serial communications (craft) port. On the model PS3148N, which includes alarm LEDs, these functions are performed via a front panel serial communications (craft) port.

To simplify installation, setup and maintenance of ARRIS’s CH3000 chassis, auto discovery of installation or removal of all active modules is performed by the PS3148.

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### SPECIFICATIONS

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<td><strong>Physical</strong></td>
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<tr>
<td>Dimensions</td>
<td>13.0” D x 4.3” H x 2.0” W (3RU) (33 cm x 11 cm x 5 cm) (occupies 2 of 16 slots in 3RU CH3000 Chassis)</td>
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| Weight          | PS3148N 3.0 lbs (1.4 kg)  
                                 PS3148D 3.2 lbs (1.4 kg) |
| **Environmental** |               |
| Operating Temperature Range |               |
| Standard power conditions (load ≤ 216W) | –20° to +65°C (–4° to 149°F) |
| High power conditions (load ≤ 250W) | 0° to +50°C (+32° to 122°F) |
| Storage Temperature Range | –40°C to +85°C (-40°F to +185°F) |
| Humidity        | 5% to 95% non-condensing |
| **Electrical**  |               |
| Input           | –48 VDC nom. (from –36 to –60 VDC)  
                                      Over-current protection: 16A fuse |
| Output          | Nominal voltage: 12.0 VDC  
                                      Max power: 250 W |
| Efficiency      | Max load: > 80%  
                                      50% load: > 75% |
| Load sharing accuracy | ± 5% |
| Hot standby     | < 500 μs (auto-parallel, diode-“OR’d”) |
| **General**     |               |
| Hot Swappable   |               |
| Over-temperature shutdown protection |               |
| Front panel RS-232 craft port |               |

**Indicator LEDs on model PS3148N**

**Status LEDs**
- Green = OK  
- Yellow = Non-service-affecting alarm  
- Red = Service-affecting alarm

**Access Indicator LED**
- Blue = Lit during communication with chassis modules

**Back-Up P/S Indicator LED**
- Green = Lit if back-up power is present within the chassis (either another PS3000 series power supply or an external 12 VDC source connected to a CX3002 Communications Module which has been installed in the rear of a power supply)
ORDERING INFORMATION

| P | S | 3 | 1 | 4 | 8 | *

48 VDC Power Supply

* = D (with Display) or N (without Display)

Required Module Back Plate

BP - P 2

Back Plate is included with ordered module

Customer Care

Contact Customer Care for product information and sales:
- United States: 866-36-ARRIS
- International: +1-678-473-5656

Note: Specifications are subject to change without notice.

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