Headend Optics Platform (CH3000)

PS3005
250 Watt AC Power Supply

FEATURES

- 250 Watts
- Two models available:
  - Alphanumeric display (PS3005D)
  - Status LEDs (PS3005N)
- Continuous AC input voltage range from 100 to 240 V, 50/60Hz
- High power factor, 0.95 at 120V
- Long hold-up time
- Hot swappable
- Supports redundant power supplies
- Occupies two full-depth slots
- Monitoring and control of chassis-resident active modules via RS-232 port
- Monitors and detects chassis platform alarms
- PS3005D allows local monitoring and control without additional hardware
- Over temperature protection

PRODUCT OVERVIEW

The PS3005 is a high performance, hot-swappable, 250 watt power supply and controller designed for the CH3000 chassis. The PS3005 accepts an AC input voltage in the continuous range from 100 to 240 volts at 50 to 60 Hz and provides 12 volts DC to the mid-plane bus of the CH3000 for distribution to chassis modules. The PS3005 manages the RS285 communication on the mid-plane bus, providing user access to the alarm, control and monitoring features of the active modules in the chassis. For easy set-up of the CH3000, the PS3005 continuously polls and performs auto-discovery of all active modules in the chassis.
PS3005 Power Supply

The PS3005 features power factor correction (PFC) for reduced energy costs, a minimum holdup time of 25 ms for glitch-less switch-over to stand-by power and a front panel RS232 craft port. Additional features include over-voltage, short-circuit and over-temperature protection.

The PS3005 requires two full-depth slots in the CH3000 chassis and mates with the BP-P1 dynamic back plate provided with the unit. An optional 6 foot 3-wire line cord is available.

The PS3005 is available in two configurations, the PS3005D with front panel fluorescent display and joystick and the PS3005N with front panel status LEDs only. The PS3005D with its display and joy stick features allows the user direct access to the alarm, control and monitoring features of the active modules in the chassis without additional equipment. These may also be accessed via the RS232 craft port using ARRIS’s CMS software. The PS3005N provides the user with alarm status of the chassis only via the status LEDs. Alarm detail to the module level as well as control and monitoring features are accessed via the RS232 craft port using ARRIS’s CMS software.

### RELATED PRODUCTS

<table>
<thead>
<tr>
<th>Optical Transmitters</th>
<th>Optical Passives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Return</td>
<td>Optical Patch Cords</td>
</tr>
<tr>
<td>BP Back plates</td>
<td>Installation Services</td>
</tr>
</tbody>
</table>
## SPECIFICATIONS

### Physical

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<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)</td>
</tr>
<tr>
<td>Weight</td>
<td>3.1 lbs (1.4 kg)</td>
</tr>
<tr>
<td>Space allocation</td>
<td>2 full-depth slots in CH3000 Chassis</td>
</tr>
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### Environmental

#### Operating Temperature Range
- Standard power conditions (load ≤ 216W): –20°C to +65°C (–4° to 149°F)
- High power conditions (load ≤ 250W): 0°C 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

#### AC Input:
- Rated Voltage: 100 to 240 V, continuous
- Operating Voltage: 90 to 264 V
- Frequency: 50/60 Hz
- Power Factor: 0.95 minimum, at full load
- Fuse: 8A/250V SLO-BLO, 5 x 20mm

#### DC Output:
- Voltage: 12.0 VDC nominal
- Current: 21 Amps max. (250 watts)
- Efficiency: 83% typical at 120V input, 18 - 21 Amp load
- Protection: Over-voltage and short circuit

#### General
- Hot Swappable
- Over-temperature with auto-reset
- Front panel RS-232 craft port

### Indicator LEDs on model PS300SN

<table>
<thead>
<tr>
<th>Status LEDs</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green = OK</td>
<td>Non-service-affecting alarm</td>
</tr>
<tr>
<td>Yellow = Non-service-affecting alarm</td>
<td></td>
</tr>
<tr>
<td>Red = Service-affecting alarm</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Access Indicator LED</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue = Lit</td>
<td>Lit during communication with chassis modules</td>
</tr>
<tr>
<td>Back-Up P/S Indicator LED</td>
<td>Lit if second power supply is present within chassis</td>
</tr>
</tbody>
</table>

### Regulatory Compliance

- IEC 60950-1; EN 60950-1; UL 60950-1
- CSA C22.2 No. 60950-1
- EN 55024
- EN 55022, Class B
- VCCI V-3
- FCC Part 15, Subpart B, Class B
- ICES-003, Class B

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**Diagram:**

- AC Power Input
- RS-232C
- Ethernet (10BaseT)
- PS3005 Power Supply
- Chassis Controller
- Communications Interface
- Active Module
- Communications Bus
- Midplane
- 12 VDC

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**Ask us about the complete Access Technologies Solutions portfolio:**

**Headend Optics-PS3005**

- **Fiber-Deep**
- **DOCSIS® 3.1**
- **Node Segmentation**
- **HPON™/RFoG**
- **FTTx**
ORDERING INFORMATION

P | S | 3 | 0 | 0 | 5 | * | – | *

250W AC Power Supply
* = D (with Display) or N (without Display)
* = (with power cord) or 2 (without power cord)

Required Module Back Plate
BP – P 1
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

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