The Network Power Supply (NPS) provides regulated +15 VDC to the OctoPlex dual CAN network system. The power supply utilizes one AC and two DC power inputs for redundancy.

**Product Highlights:**
- 120 VAC Input Power (Carling P/N A3205-1)
- 230VAC Input Power (Carling P/N A3205-2)
- +24V DC Input Power
- Dual CAN Bus Connection/Communications
- 7.5 amp Thermal breakers for each 15 volt output
- Network Health LED Status Indicators

**Installation**

The Network Power Supply should be installed in a location that allows access to the thermal circuit breakers installed on the connector side of the unit. At least one (1) power input (AC or DC) must be present for the NPS to operate. Depending on network complexity, one (1) or more Network Power Supplies can be installed. See Diagrams for Typical Single or Multiple NPS installations.

*Manufacturer reserves the right to change product specification without prior notice. Please refer to our website for the latest details.*
The required number of Network Power Supplies will be determined by the length of the backbone and the sum of the devices powered on the network. If multiple power sources are required, V+ (NET-S) must be broken (on both Buses) between the sources. The SHIELD (drain) must be connected at only ONE power supply.

**WARNING!**
Pin Out Connections

<table>
<thead>
<tr>
<th>Connector</th>
<th>Pin</th>
<th>Connection</th>
<th>View</th>
<th>Mating Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>J1 / J2</td>
<td>1</td>
<td>Shield</td>
<td></td>
<td>Device Net Mini-C Male</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Power Output</td>
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<tr>
<td></td>
<td>3</td>
<td>Power Return</td>
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<tr>
<td></td>
<td>4</td>
<td>CAN HI</td>
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<tr>
<td></td>
<td>5</td>
<td>CAN LOW</td>
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<td></td>
</tr>
<tr>
<td>J3</td>
<td>1</td>
<td>AC Neutral</td>
<td></td>
<td>DT06-4S</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>AC Ground</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>3</td>
<td>AC Ground</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>4</td>
<td>AC Line</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J4 / J5</td>
<td>1</td>
<td>DC Power Input</td>
<td></td>
<td>DT06-2S</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>DC Power Return</td>
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</tr>
</tbody>
</table>

* Two female Mini-C connectors are provided for connection to the primary and secondary CAN Bus via drop cables.

Operation

Standard Network Power Supply Screen Layout

The NPS screen shows Status of the input power, Source of power (AC, DC1 DC2), CAN A and CAN B status, CAN A and CAN B Voltage and Current readings, and the internal box temperature.

Maintenance

The Network Power Supply requires no maintenance. Any service or repair issues should be handled by a factory authorized technician.
General Specifications

**Electrical**
- AC Voltage Input
  - A3205-1: 90-126VAC; 56Hz - 63Hz
  - A3205-2: 220-264VAC; 47Hz-53Hz
- AC Input Current (Max) 2 Amps
- DC Voltage Input 18VDC ~ 36VDC
- DC Input Current (Max) 6 Amps
- CAN Bus Output Voltage +15 VDC (± 0.5)

**Environmental**
- Radiated, RF Field Immunity IEC-61000-4-3
- Electrical Fast Transient/Burst Immunity IEC 61000-4-4
- Voltage Surge Immunity IEC 61000-4-5
- Conducted, Immunity IEC 61000-4-6
- Conducted Emissions IEC 60945
- Voltage Variation Immunity IEC 61000-4-11
- Conducted LF Immunity IEC 61000-4-16
- ESD Immunity IEC-61000-4-2
- Insulation Resistance IEC-60092-504
- Operating Temperature -40°C to +70°C
- Storage Temperature -40°C to +85°C
- Vibration IEC-60068-2-6 Test Fc
- Temperature Cycle IEC 60945
- Humidity IEC-60068-2-30 Test Db
- Corrosion IEC 60945
- Weight 6.0 lbs (2.72 kg) Max

**Mechanical**
- Dimensions 7.80” X 8.84” X 3.85”
- CAN Bus Connectors Two (2) Mini Female
- AC Power Input Connector Deutsch P/N DT06-4S
- DC Power Input Connector Two (2) Deutsch P/N DT06-2S
- Mounting 4 each 4 x 0.16 #6 hardware
- Orientation N/A

**Certifications**
- NMEA 2000 Category B
- Lloyd’s Register Lloyd’s Type Approved, Test Specification #1, Env 2
- IEC 60533 Electrical and Electronic Installations in Ships
- IEC 60945 Maritime Navigation and Radio Communication Equipment and Systems

Dimensional Specifications: in. [mm]

Network Power Supply
A3205-[]

- Power Label
- Identification Plate
- 0.16 Wide Slot for #6 Screw
- 7 1/2 A Circuit Breaker

Network Power Supply (A3205-[]) - General Specifications, Dimensional Specifications