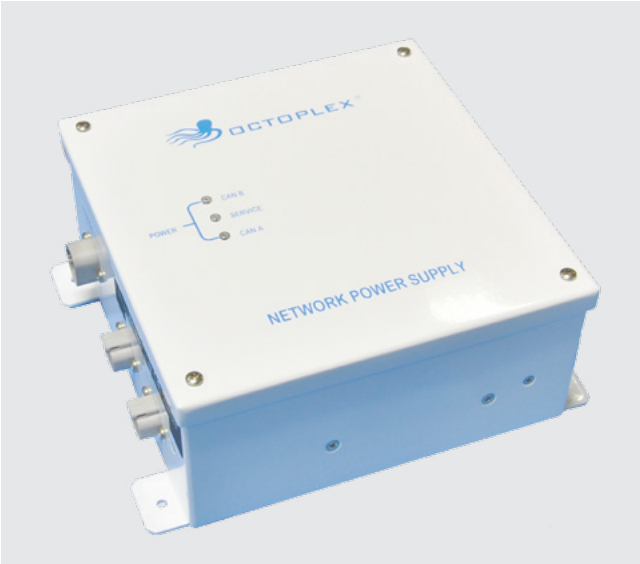
NETWORK POWER SUPPLY

A3205-[ ]

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

Table 1:

LED Indicator	Color	Condition
CAN Bus A	Green	CAN Bus On
	No Indication	CAN Bus Off
Service	Red	Needs Service
	No Indication	Normal Operation
CAN Bus B	Green	CAN Bus On
	No Indication	CAN Bus Off

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.

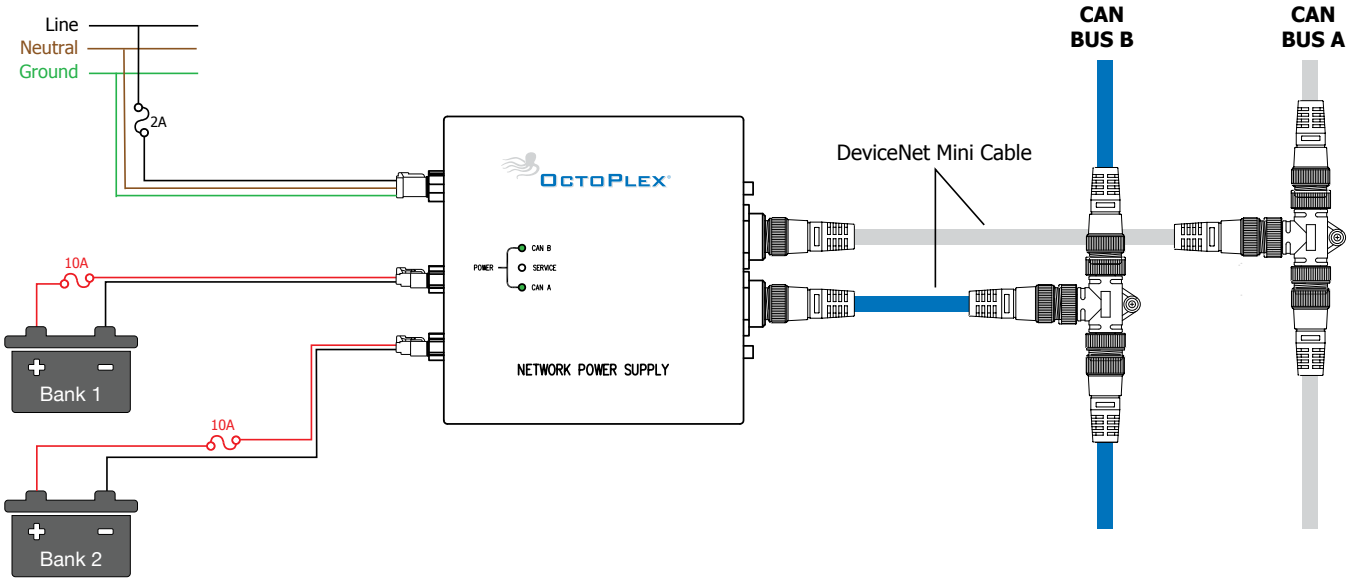
CAUTION!

This is the only OctoPlex® component, which uses Mini/Thick cable and Mini-C connectors (other components use Micro-C connectors). The drops used for this component should have a Male Mini-C connection on both ends.

*Manufacturer reserves the right to change product specification without prior notice. Please refer to our website for the latest details.

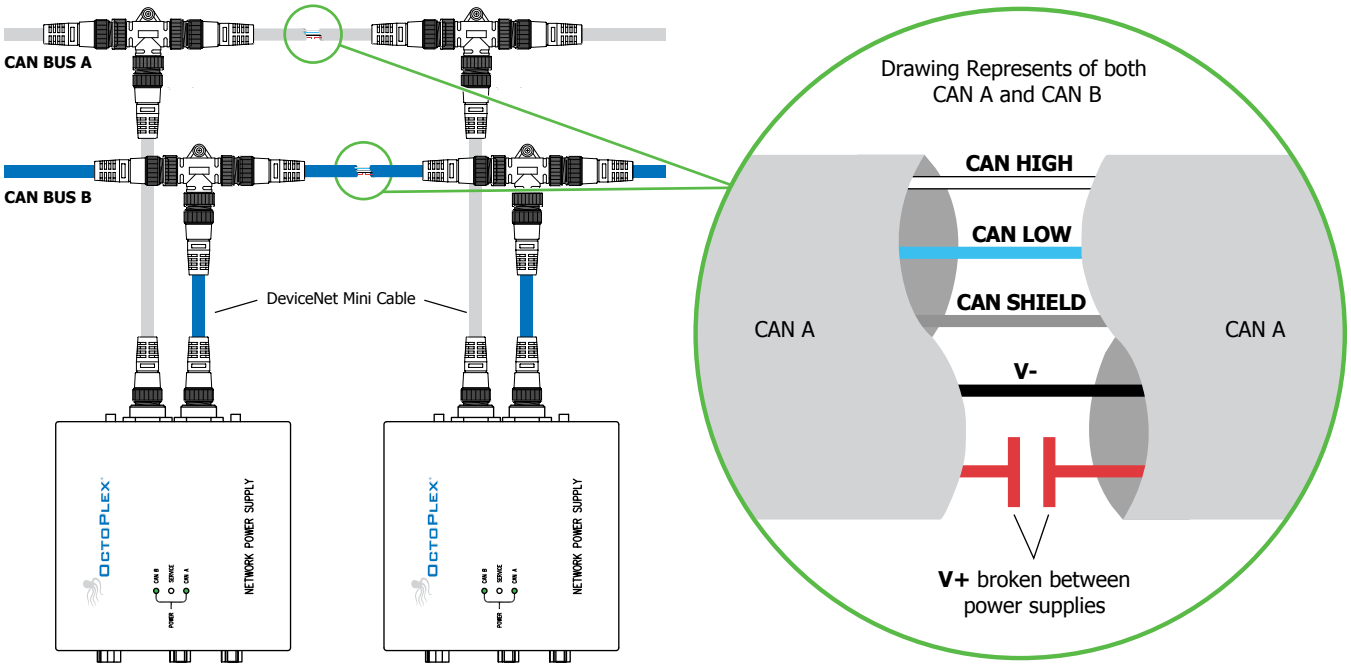
Typical Installation Diagram's

Single Network Power Supply



Typical Installation Diagram's

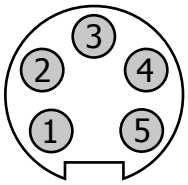
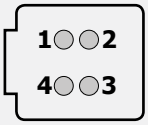
Multiple Network Power Supply



WARNING!

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.

Pin Out Connections

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

* 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.

NOTE

This page can vary between installations, as format is determined and/or customizable by the boat builder or owner.

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)

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
CE	**IEC 60533** Electrical and Electronic Installations in Ships **IEC 60945** Maritime Navigation and Radio Communication Equipment and Systems

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

Dimensional Specifications: in. [mm]

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