Bently Nevada 106M1081-01

Universal AC Power Input Module



Bently Nevada 106M1081-01 is the universal AC Power Input Module used with the 3500/15 universal AC power-supply arrangement. It forms the incoming-power interface at the rear of the rack and pairs with the separately identified 106M1079-01 supply module. The supply assembly converts the AC input into the voltages needed by the 3500 monitoring system and can participate in a primary-and-backup rack power configuration. This PIM belongs to the universal AC design; the complete part number prevents confusion with the incompatible legacy high- or low-voltage AC input modules.

Technical Specifications

Product Identity	
Part number	106M1081-01
Component	Universal AC Power Input Module (PIM)
PIM dimensions (H x W x D)	120.7 x 25.4 x 114.3 mm
Functional Configuration	
Family	3500/15
Nominal AC input	110 to 220 Vac
Non-hazardous input range	85 to 264 Vac rms
Hazardous-area input range	85 to 250 Vac rms, subject to approval requirements
Rack position	Special half-height position behind the associated power supply
Legacy AC compatibility	Not compatible with legacy AC supply / high- or low-voltage AC PIM arrangement
Performance & Power	
Input frequency	47 to 63 Hz
Environment	
Operating temperature	-30 to +65 degrees C
Humidity	95%, non-condensing

Selected original manufacturer material follows on pages 3–6.

Compatibility & Selection Guide

System compatibility. The 3500/15 system can support one or two power supplies; with two installed, the lower supply is primary and the upper supply is backup. The universal AC supply and PIM are not compatible with the legacy AC supply or legacy high- and low-voltage AC PIMs. Match 106M1081-01 to the correct power-supply generation when maintaining an existing 3500 rack.

Wiring & Installation Reference

Universal AC input selection

1. Identify the supply generation Confirm the universal AC PIM and associated supply rather than a legacy high- or low-voltage AC arrangement.

2. Check the input limits Apply the manufacturer range for the actual hazardous or non-hazardous installation and review the approval conditions.

PIM position and service boundaries

1. Match both part numbers Verify 106M1081-01 on the PIM and the compatible universal AC supply.

2. Plan the service procedure Distinguish front-supply removal conditions from any work on power-input wiring; use the applicable system service documentation.

Installation precautions

The Universal AC power supply and PIM are not compatible with the legacy 3500 AC power supply or the legacy high- and low-voltage AC PIMs.

Confirm the complete PIM part number and the matching Universal AC supply generation before selecting a replacement.

View power module layout (PDF) — page 6 · View mounting reference (PDF) — page 6

Specifications

Inputs

Voltage Options

Universal Voltage AC	
Description	This option uses the universal AC Power Supply and universal AC Power Input Module (PIM).
Input Voltage	110 to 220 Vac nominal Non-hazardous areas: 85 to 264 Vac rms Hazardous areas: 85 to 250 Vac rms 120 to 373 Vac pk The universal AC Power Supply and Power Input Module are not compatible with the legacy High Voltage AC or Low Voltage AC units.
Input Frequency	47 to 63 Hz
High Voltage DC	
Description	This option uses the High Voltage DC Power Supply and the High Voltage DC Power Input Module (PIM).
Input voltage	88 to 140 Vdc
Low Voltage DC	
Description	This option uses the Low Voltage DC Power Supply and the Low Voltage DC Power Supply Input Module (PIM).
Input voltage	20 to 30 Vdc

Current Information

Out of Range Protection	For all power supply options, an under-voltage does not harm the supply or the PIM. An over-voltage causes the fuse to open on the PIM.
Full Rack Current Draw	
Universal voltage AC	2.8 A rms (maximum)
High voltage DC	2.5 A (maximum)
Low voltage DC	11.0 A (maximum)

Outputs

Front Panel LEDs	
Supply OK LED	Indicates when the power supply is operating properly

Physical

Power Supply Module	
Dimensions (Height x width x depth)	120.7 mm x 50.8 mm x 251.5 mm 4.75 in x 2.0 in x 9.9 in
Weight	1.39 kg 3.06 lb
Power Input Modules	
Dimensions (Height x width x depth)	120.7 mm x 25.4 mm x 114.3 mm 4.75 in x 1.0 in x 4.5 in
Weight	0.34 kg 0.75 lb

Rack Space Requirements

Power supply module	Two half-height slots are located on the left side of the rack. Each slot accommodates one power supply. Both slots can hold a power supply at the same time, allowing for redundant power supplies.
Power input module	Special half-height module located directly behind the associated power supply

Miscellaneous

Minimum loading	No minimum rack load is required.

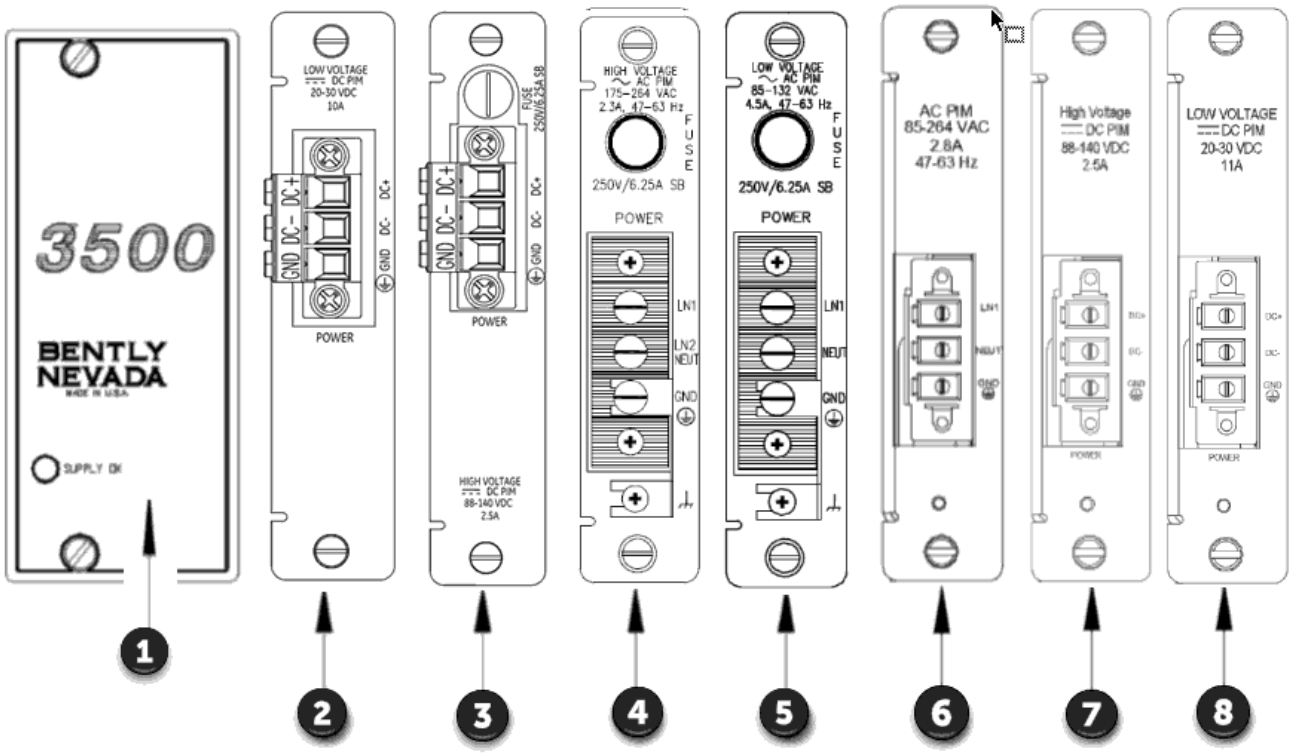
Environmental Limits

Operating temperature	-30 °C to +65 °C -22 °F to +150 °F
Storage temperature	-40 °C to +85 °C -40 °F to +185 °F
Humidity	95%, non-condensing

Spares

Part Number	Description
106M1079-01	Universal AC Power Supply Module
106M1081-01	Universal AC Power Input Module
129486-01	Legacy High Voltage DC Power Supply Module
129478-01	Legacy High Voltage DC Power Input Module
133292-01	Legacy Low Voltage DC Power Supply Module
133300-01	Legacy Low Voltage DC Power Input Module
114M5329-01	High Voltage DC Power Supply
115M7750-01	High Voltage DC PIM
114M5330-01	Low Voltage DC Power Supply
114M5335-01	Low Voltage DC PIM
01720025	Replacement Fuse (for both AC Power Input Module and Legacy High Voltage DC Power Input Module)
01720045	Replacement Fuse (Low Voltage DC Power Input Module and Legacy Low Voltage DC Power Input Module)
120M3877	Replacement Fuse Fast blow rated at 5A/500 Vac Size 6.3 x 32 mm (Universal AC Power Input Module)
131150-01	Power Supply Blank Front Panel (qty 1, includes screws)
128085-01	Power Supply Rear Input Connector Cover (qty 1) Order part 04310251 for screws.
04310251	Screw for Power Supply Input Cover (qty 2)
129767	3500/15 Power Supply User Guide
118M0915-01	Replacement connector for Universal AC Power Input Module
118M0915-02	Replacement connector for DC Power Input Module
129M0198	Replacement fuse (High Voltage DC Power PIM (Power input Module)

Graphs and Figures



1. 3500/15 AC and DC Power Supplies OK LED
2. Legacy Low Voltage DC Power Input Module
3. Legacy High Voltage DC Power Input Module
4. Legacy High Voltage AC Power Input Module
5. Legacy Low Voltage AC Power Input Module
6. Universal AC Voltage Power Input Module
7. High Voltage DC Power Input Module
8. Low Voltage DC Power Input Module

Figure 1: 3500/15 Power Supply and PIMS