GE Measurement & Control

3500/15 Power Supply
Product Datasheet

Bently Nevada* Asset Condition Monitoring

Description

The 3500/15 Power Supply is a half-height module and must be installed in designated slots on the left side of the rack. The 3500 rack can contain one or two power supplies with any combinations of AC and DC. Either supply can power a full rack.

When two power supplies are installed in a rack, the one in the lower slot acts as the primary supply, and the other in the upper slot acts as the backup supply. If installed, the second supply is the backup for the primary one.

Removing or inserting either power supply module does not disrupt operation of the rack as long as a second power supply is installed.

The 3500/15 Power Supply accepts a wide range of input voltages and converts them to voltages acceptable for use by other 3500 modules. The following power supplies are available with the 3500 Series Machinery Protection System:

- Legacy AC Power
- Universal AC Power
- High Voltage DC Power Supply
- Low Voltage DC Power Supply

Specifications

Inputs

The following voltage options are available:

Legacy High Voltage AC	
Description	This option uses the AC power supply and the High Voltage AC Power Input Module (PIM).
Input voltage	220 Vac nominal 175 to 264 Vac rms 247 to 373 Vac pk Installations using AC Power Input Modules (PIM) prior to Rev. R and AC Power Supply Modules prior to Rev. M require an input voltage of 175 to 250 Vac rms.
Input frequency	47 to 63 Hz

Legacy Low Voltage AC	
Description	This option uses the AC power supply and the Low Voltage AC Power Input Module (PIM).
Input voltage	110 Vac nominal 85 to 132 Vac rms 120 to 188 Vac pk Installations using AC Power Input Modules (PIM) prior to Rev. R and AC Power Supply Modules prior to Rev. M require an input voltage of 85 to 125 Vac rms.
Input frequency	47 to 63 Hz

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 85 to 264 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

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	
High voltage AC	2.3 A rms (maximum)
Low voltage AC	4.5 A rms (maximum)
Universal voltage AC	2.8 A rms (maximum)
High voltage DC	2.5 A (maximum)
Low voltage DC	10.0 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

Compliance and Certifications

EMC	**Standards:** EN 61000-6-2 Immunity for Industrial Environments EN 61000-6-4 Emissions for Industrial Environments **European Community Directive:** EMC Directive 2014/30/EU
Electrical Safety	**Standards:** EN 61010-1 **European Community Directive:** LV Directive 2014/35/EU

Hazardous Area Approvals

For the detailed listing of country and product specific approvals, refer to the **Approvals Quick Reference Guide**, document 108M1756, at www.GEmeasurement.com.

CSA / NRTL/C **(Approval Option 01)**	Ex nC [L] IIC T4 Gc Class I, Division 2, Groups A, B, C, D Class I, Zone 2 AEx nC IIC T4 Gc Class I, Division 2 Groups A, B, C, D T4 @ Ta = -20 °C to +65 °C (-4 °F to +150 °F) per drawing 149243 or 138547
ATEX / IECEx **(Approval Option 02)**	II 3 G Ex nA nC ic IIC T4 Gc T4 @ Ta = -20 °C to +65 °C (-4 °F to +150 °F)

Ordering Information

For the detailed listing of country and product specific approvals, refer to the **Approvals Quick Reference Guide**, document 108M1756, at www.GEmeasurement.com.

Product Description

3500/15 AXX - BXX - CXX

A: Power Supply Type (Top Slot)
- **01** Low Voltage AC (85 to 132 Vac rms)
- **02** High Voltage AC (175 to 264 Vac rms)
- **03** High Voltage DC (88 to 140 Vdc)
- **04** Low Voltage DC (20 to 30 Vdc)
- **05** Universal AC Voltage (85 to 264 Vac rms)

B: Power Supply Type (Bottom Slot)
- **00** No supply (Used when no supply is required)
- **01** Low Voltage AC (85 to 132 Vac rms)
- **02** High Voltage AC (175 to 264 Vac rms)
- **03** High Voltage AC (88 to 140 Vdc)
- **04** Low Voltage AC (20 to 30 Vdc)
- **05** Universal AC Voltage (85 to 264 Vac rms)

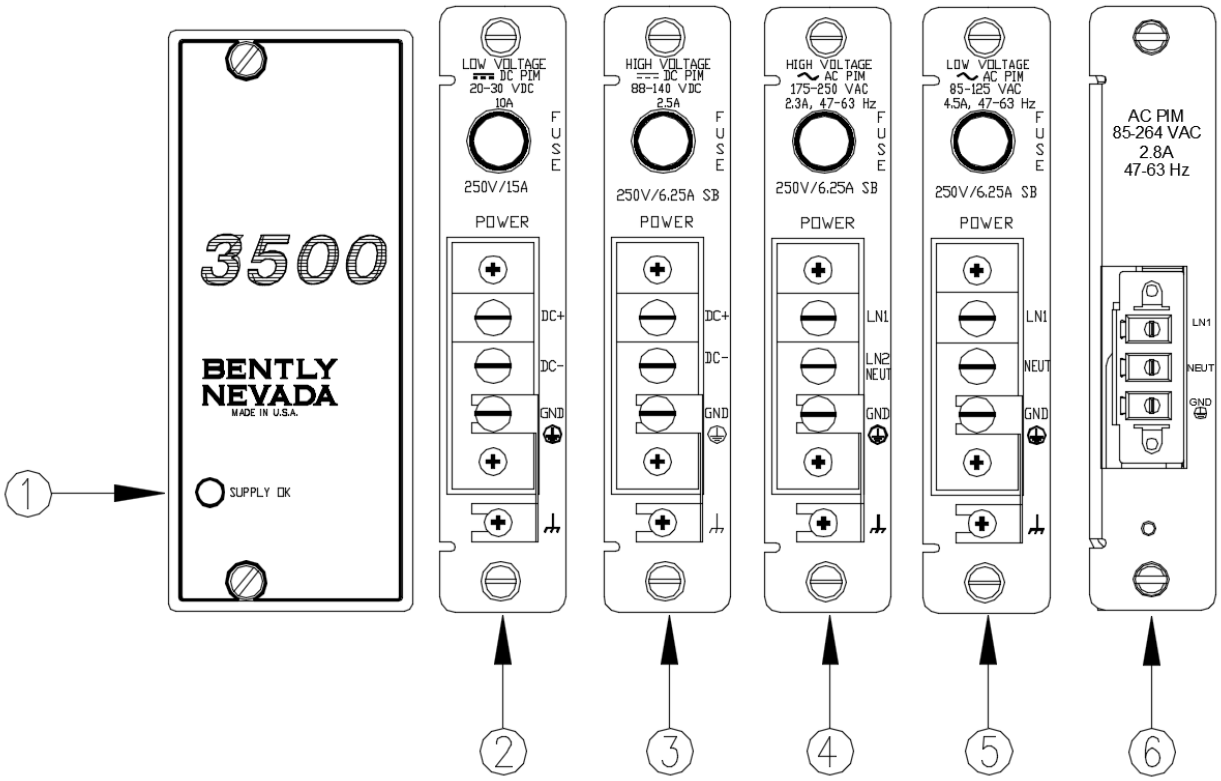
C: Agency Approval
- **00** None
- **01** CSA / NRTL / C (Class 1, Division 2)
- **02** ATEX / IECEx / CSA (Class 1, Zone 2)

Spares

Part Number	Description
127610-01	AC Power Supply Module
125840-01	High Voltage AC Power Input Module
125840-02	Low Voltage AC Power Input Module
106M1079-01	Universal AC Power Supply Module
106M1081-01	Universal AC Power Input Module
129486-01	High Voltage DC Power Supply Module
129478-01	High Voltage DC Power Input Module
133292-01	Low Voltage DC Power Supply Module
133300-01	Low Voltage DC Power Input Module
01720025	Replacement Fuse (for both AC Power Input Module and High Voltage DC Power Input Modules)
01720045	Replacement Fuse (Low Voltage DC Power Input Module)
113M0744	Replacement Fuse Fast blow rated at 5A/250 Vac Size 6.3 x 32 mm (Universal AC Power Input Module)
129767-01	Power Supply Operations and Maintenance Manual
102M3992	Replacement connector for Universal AC Power Input Module and DC Power Input Modules

Graphs and Figures

The following picture depicts the front and rear view of 3500/15 Power Supply and Input Modules:



1: 3500/15 Power Supply OK LED
2: Low Voltage DC Power Input Module
3: 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

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