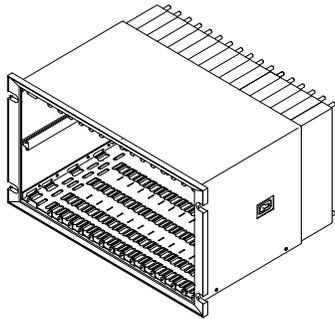


# 3500/05 System Rack

Bently Nevada\* Asset Condition Monitoring

## Description

The 3500 System rack design holds all 3500 monitor modules and rack power supplies. It allows the various 3500 modules to communicate with one another and the power supplies to distribute power to each module as required.



3500 Racks are available in two sizes:

1. **Full-size Rack** – 19-inch EIA rack with 14 available module slots
2. **Mini-Rack** – 12-inch rack with 7 available module slots

3500 racks are available in three formats:

1. **Panel mount** – This rack format is mounts to rectangular cut-outs in panels, and secures to the panel using clamps supplied with the rack. Wiring connections and I/O modules are accessible from the rear of the rack.
2. **Rack mount** – This rack format is mounts the 3500 rack on 19-inch EIA rails. Wiring connections and I/O modules are accessible from the rear of the rack.
3. **Bulkhead mount** – This rack format mounts the rack against a wall or panel when it is not possible to access the rear of the rack. Wiring connections and I/O modules are accessible from the front of the rack. The 3500/05 Mini-Rack is not available in this format.

The Power Supplies and Rack Interface Module must occupy the far left rack positions. The remaining 14 rack positions (7 rack positions for the Mini-Rack) are available for any combination of modules. If you plan to install internal barriers in the 3500 rack, consult our document part number 141495-01, Specifications and Ordering Information for 3500 Internal Barriers.



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## Specifications

### Hazardous Area Approvals

CSA/C/US

ATEX

Brazil

Refer to the data sheet of applicable monitor being inserted into the rack.

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### CE Mark Directives

#### BN 136669

Bently Nevada Low Voltage Directive

#### BN 134036

Bently Nevada EMC Directive

#### EN61000-6-4

*Radiated Emissions*

EN 55011, Class A

*Conducted Emissions*

EN 55011, Class A

#### EN61000-6-2

*Electrostatic Discharge*

EN 61000-4-2, Criteria B

*Radiated RFI*

EN61000-4-3, Criteria A

*Conducted Susceptibility*

EN61000-4-3, Criteria A

*Electrical Fast Transient*

EN 61000-4-4, Criteria B

*Surge Capability*

EN 61000-4-5, Criteria B

*Magnetic Field*

EN 61000-4-8, Criteria A

*Power Supply Dip*

EN 61000-4-11, Criteria B

*Radio Frequency*

EN61000-4-6, Criteria A

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## Ordering Considerations

- Racks with Internal Barriers installed require a 3500/04-01 Internal Barrier Earthing Module to provide the IS Earth connection to the 3500/05 rack. This earthing module requires a dedicated rack position.
- The 3500/93 System Display A01 System Face Mount option is incompatible with the 3500/05 Mini-rack.
- The 3500/05 Mini-rack is not available in the Bulkhead mount option.
- The 3500/06 Weatherproof housing is not compatible with the 3500/05 Bulkhead Mount option.
- When using a 3500 Mini-rack in an EIA rack, a 144863-01 19-inch EIA Adapter Panel is required.
- The 3500 Mini-rack requires Version 2.70 or later of the 3500/01 Software.

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## Ordering Information

### Rack Ordering Information

#### 3500/05-AXX-BXX-CXX-DXX-EXX

#### A: Rack Size

- 01** 19-inch Rack (14 module slots)
- 02** 12-inch Mini-Rack (7 module slots)

#### B: Mounting Options

- 01** Panel Mount Option, Full-Size Rack
- 02** Rack Mount Option, Full-Size Rack (mounts to 19-inch EIA Rack)
- 03** Bulkhead Mount Option (not available in Mini-Rack)
- 04** Panel Mount Option, Mini-Rack
- 05** Rack Mount Option, Mini-Rack

- C: Agency Approval Option  
     **00** None  
     **01** CSA - C - US  
     **02** ATEX/CSA
- D: Reserved  
     **00** None
- E: European Compliance Option  
     **00** None  
     **01** CE

**Full-height  
Blank Monitor  
Cover Kit**

Order as 130768-01 which  
includes

**130944-01**

Full-height Monitor Blank Front  
Panel (Qty 1)

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**Spares**

**Part Number**

Description

**128031-01**

I/O Module Cover (Qty 1)

**Half-height  
Module Adapter**

**04310251**

Screw for I/O Module Cover (Qty 2)

Order the following

**Half-height  
Blank Monitor  
Cover Kit**

**125388-01**

Half-height Module Internal  
Chassis (Qty 1)

Order the Following

**125565-01**

Half-height Module Card Guide  
(Qty 1)

**131151-01**

Half-height Blank Front Panel  
Cover (Qty 1)

**04300111**

Screws for Half-height Module  
Internal Chassis (Qty 3)

**Misc  
Components**

**00561941**

TMR/SIM jumper (installed on the  
3500 backplane)

**Power Supply  
Blank Cover Kit**

Order the following

**144863-01**

Adapter Panel, Mini-rack, 19-inch

**131150-01**

Power Supply Blank Front Panel  
(Qty 1)

**129766-01**

Rack Installation and  
Maintenance Manual

**128085-01**

Power Supply Input Connector  
Cover (Qty 1)

**130432-01**

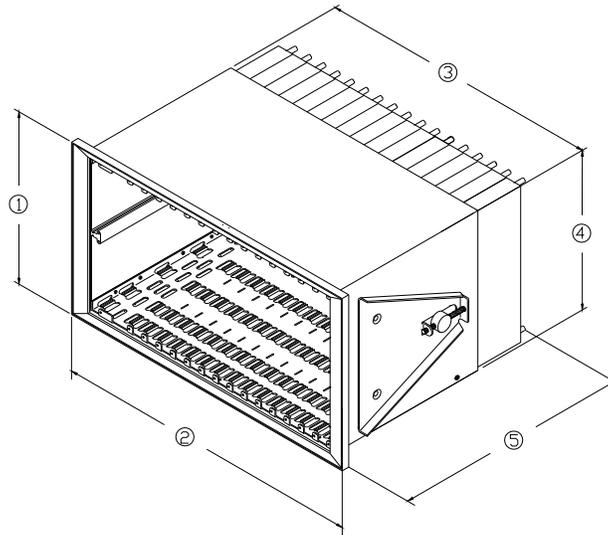
Field Wiring Diagrams

**04310251**

Screw for Power Supply Input  
Cover (Qty 2)

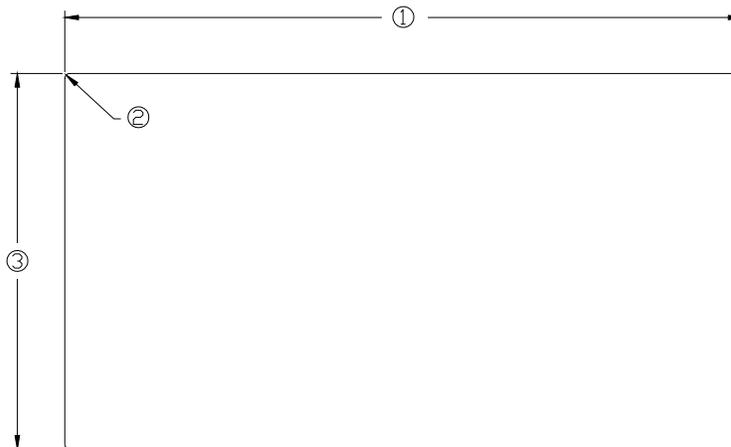
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## Figures and Tables



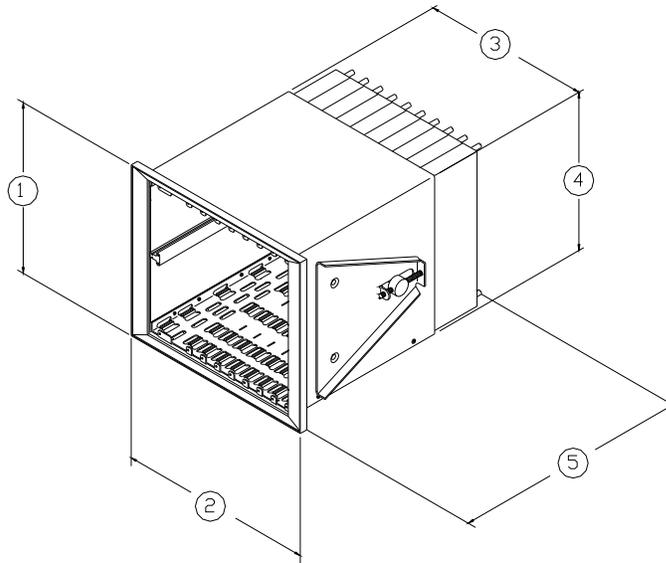
1. 265.94 mm (10.470 in.)
2. 482.60 mm (19.000 in.)
3. 441.96 mm (17.400 in.)
4. 246.38 mm (9.700 in.)
5. 349.25 mm (13.750 in.), 422.91 mm (16.650 inches) if used with internal barriers

### 3500 Full-Size rack mounting dimensions for the Rack and Panel Mount Configuration



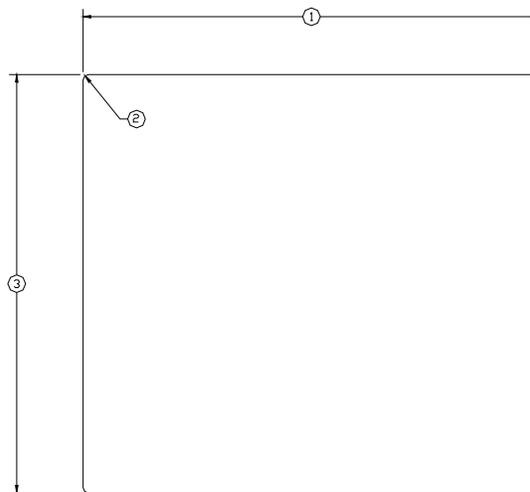
1. 452.1 +/- 1.5 mm (17.80 +/- 0.06 in.)
2. 3.2 mm (0.125 in.) radius, maximum
3. 251.5 +/- 1.5 mm (9.90 +/- 0.60 in.)

### 3500 Full-Size Rack Recommended Panel Cutout



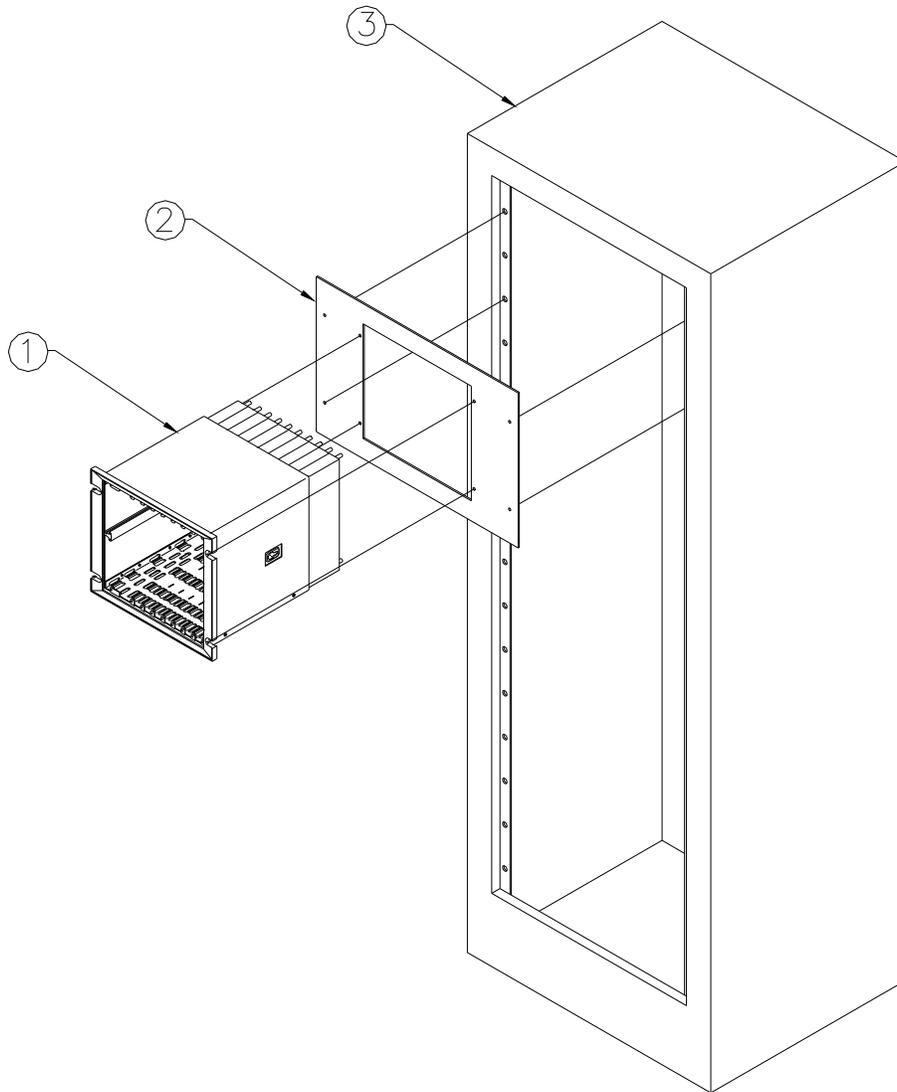
1. 10.470 inches (265.94 mm).
2. 12.000 inches (304.80 mm).
3. 10.400 inches (264.16 mm).
4. 9.700 inches (246.38 mm).
5. 13.750 inches (349.25 mm), 16.650 inches (422.91 mm) if used with internal barriers

### 3500 Mini-rack mounting dimensions for the Panel Mount Configuration



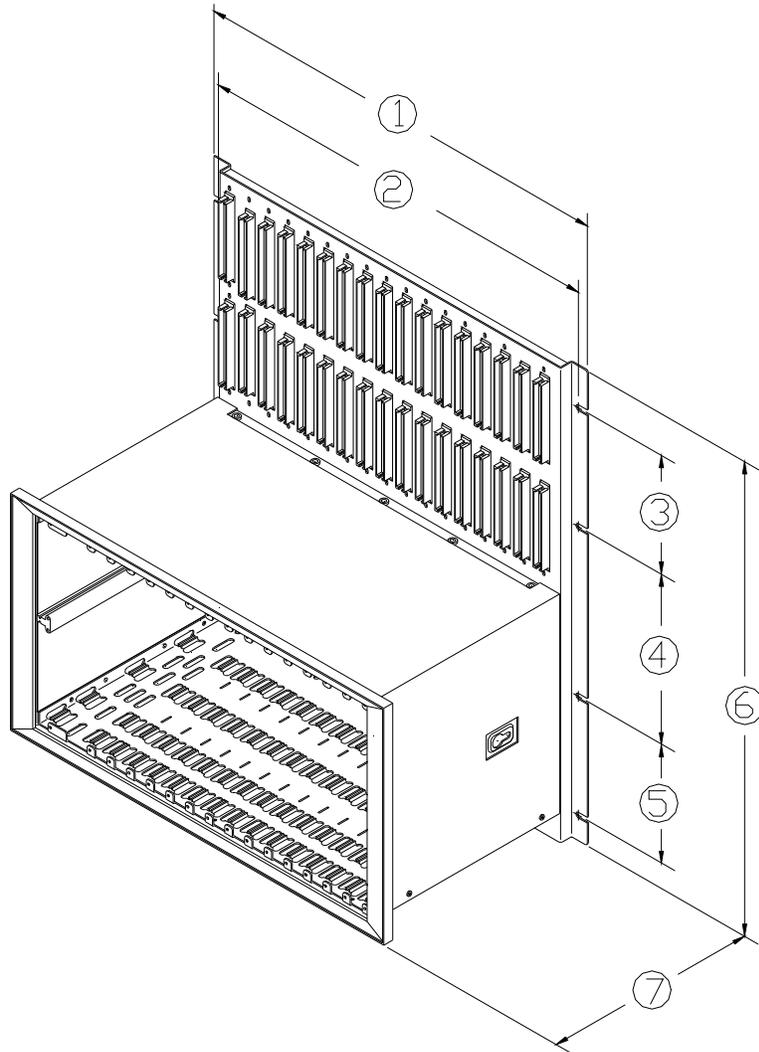
1. 274.3 +/- 1.5 mm (10.80 +/- 0.06 in.)
2. 3.2 mm (0.125 in.) radius, maximum.
3. 251.5 +/- 1.5 mm (9.90 +/- 0.60 in.)

### 3500 Mini-rack Recommended Panel Cutout



1. 3500 Mini-rack
2. Adapter Panel
3. Standard 19-inch EIA rack

### 3500 Mini-rack and Adapter Panel mounting to a 19-inch EIA Rack



1. 482.60 mm (19.000 inches)
2. 459.59 mm (18.094 inches)
3. 133.35 mm (5.250 inches)
4. 190.50 mm (7.500 inches)
5. 133.35 mm (5.250 inches)
6. 532.64 mm (20.970 inches)
7. 266.70 mm (10.500 inches)

### Dimensions of a Bulkhead Mount 3500 rack

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