Bently Nevada 3500/94M

01 Function and selected configuration

Product function

Bently Nevada 3500/94M organizes rack information into operator screens and can consolidate several rack views through the supported router arrangement.

Selected configuration

The 3500/94M display arrangement combines a VGA main module, an I/O module and a supported 10-inch or15-inch touch screen. It presents events, alarm/OK state and channel/module data; up to nine custom screens can be configured around machine-train groups.

Functional path

3500 rack data	VGA module / I/O	Video and touch paths	Operator screen

Assembly role	VGA display monitor
Video interface	Analog VGA:RGB and sync
Touch interface	RS232

The system uses analog VGA video and RS232 touch-controller data. Standard display/router cabling reaches up to 6 m from a rack. The optional display-router arrangement allows one display to view up to four racks, while retaining the cable and component requirements for each rack.

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02 Technical operating envelope

Assembly role	VGA display monitor
Video interface	Analog VGA:RGB and sync
Touch interface	RS232
System direct cable	Up to 6 m
System custom screens	Up to 9

Optional router	Up to 4 racks
Module power	4.6 W maximum
Operating temperature	-20 to+65 degrees C
Humidity	95%;non-condensing

The complete system controls display reach and screen functions. No unsupported hardware interchangeability is implied by similar 3500 display names.

Signal interpretation

The system uses analog VGA video and RS232 touch-controller data. Standard display/router cabling reaches up to 6 m from a rack. The optional display-router arrangement allows one display to view up to four racks, while retaining the cable and component requirements for each rack.

Interface boundary

Remote viewing over distances up to 10 km requires the supported single-mode fiber KVM extension arrangement. The KVM transmitter and receiver must be in a safe area or approved enclosure. Default displays include 1X-filtered vibration and proximity gap values. A configured page layout does not replace the underlying rack protection configuration.

What direct cable length is used between 3500/94M and a display or router?

Standard VGA cabling is limited to 6 m from the rack in the supported arrangement. Longer ordinary cables may degrade image quality.

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03 System integration and applications

Rack information display

Present channel values, events and alarm/OK states from the assigned rack.

Multi-rack operator view

Use the supported router configuration for up to four racks.

Remote display arrangement

Use a supported fiber KVM for extended reach with the required location protection.

Display-path maintenance

Verify both video and touch interaction after restoring the affected assembly.

System and supply context

3500/94M is used with the matching 3500 display components. The touch screen, router, KVM and cables are separate unless itemized.

Application boundary

Display and router capabilities apply to the correctly assembled system. Do not infer a complete operator station from a main or I/O board alone.

Can one display using 3500/94M show several 3500 racks?

Yes. The optional display-router arrangement supports up to four racks on one display when the required modules, I/O and cables are installed.

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04 Engineering selection decisions

How many custom display screens can 3500/94M support?

Up to nine custom screens can be configured using 3500 Rack Configuration Software and organized around machine-train groups.

What default information screens are provided by 3500/94M?

One default bar-graph screen shows 1X-filtered vibration measurements and another shows proximity-transducer gap values.

Which status information remains visible with 3500/94M?

The display presents alarm and OK status, system and alarm events, and module/channel data. In the router arrangement, rack selection also indicates rack alarm or Not OK state.

Which physical interfaces carry video and touch data for 3500/94M?

The I/O VGA port carries analog red, green, blue and synchronization signals; RS232 carries touch-controller data.

Restore the matching hardware	Fit the intended main/I/O components and preserve normal versus power-only I/O selection. Reconnect the existing video, touch and power circuits by label.
Check data and event presentation	Compare live channel data, alarm/OK states and event lists with the intended rack. For a router, test selection and state indication for every connected rack.

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05 Configuration boundary and references

Lifecycle and support

The current manufacturing and factory-support phase of 3500/94M is not confirmed. Apter Power availability is assessed separately from manufacturer lifecycle status.

Replacement assessment

Match main module, normal/power-only I/O, screen and cable arrangement. Verify actual rack identity and operator functions after replacement.

Document roles

Use the original manufacturer excerpt for its preserved technical tables and drawings. This product brief explains selection and system context. The separate installation guide covers preparation, connection, tests and handover; it does not replace manufacturer instructions.

Technical basis

Bently Nevada 3500/94M VGA Display Monitor, 122M3217 Rev. N.

Related product navigation

- Bently Nevada 2300/20-00
- Bently Nevada 3500-94 145988-01

These are related references, not confirmed substitutes or an automatically approved assembly.

Product enquiries