

Bently Nevada 3500 Series Service Manual

3500/94M-02-00-01

1. Description

Part Number: 3500/94M-02-00-01

3. Product Information

Part Number: 3500/94M-02-00-01

Model: VGA Display

Manufacturer: Bently Nevada

Condition: New & Original in Factory Packing

Factory Warranty: 12 Months

Ordering Information

Model 3500/94M System Display

Display Size & Mounting 02 =10" display, 19" rack mount

KVM Extender & Router Box Cables 00 =None

Agency Approval Option 01 =CSA/NRTL/C (Class I, Division 2)

3500/94M VGA Display Unit

Inputs

Power

consumption 4.6 watts max.

High-speed

network

Monitor status, data and

values

RS232 port

(I/O) Touch controller data

Outputs

OK LED Indicates proper operation of

the module

TX/RX LED

Indicates communications

between other system

modules

VGA port (I/O) Analog red, green, blue and

sync signals to the display

Front Port 24 Vdc Power out, VGA signal

out, Touch commands in.

Environmental Limits

Operating

Temperature

-20°C to 65°C

(-22°F to 149°F)

Storage

Temperature

-40°C to 85°C

(-40°F to 185°F)

Humidity 95%, non-condensing

Compliance and Certifications

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful

interference.

2. This device must accept any interference

received, including interference that may

cause undesired operation.

EMC

Standards

EN 61000-6-2

EN 61000-6-4

Directive

2014/30/EU

Electrical

Safety

Standards

CSA C22.2 61010-1

UL EN 61010-1

Directive

2014/35/EU

RoHS Directive

2011/65/EU

Physical Characteristics

3500/94M VGA Display Module

Dimensions

(height x

width x

depth)

241.3 mm x 24.4 mm x 241.8 mm

(9.5 in x 0.96 in x 9.52 in)

Weight 0.73 kg (1.6 lb.)

I/O Module

Dimensions

(height x

width x

depth)

241.3 mm x 24.4 mm x 99.1 mm

(9.50 in x 0.96 in x 3.90 in)

Weight 0.34 kg (0.75 lb.)

10" Advantech Display (ANA-D3510-100-A1)

Dimensions

(height x

width x

depth)

249 mm x 389 mm x 48 mm

9.8 in x 15.3 in x 1.9 in

Touch

screen

(diagonal)

267 mm (10.5 in)

Weight 4.0 kg (8.78 lb)

Rack Space Requirements

Monitor Module

Rack space 1 full-height front slot

I/O Module

Rack space 1 full-height rear slot

Keyboard Video Monitor (KVM) Extender

Mounting Shelf top

Power input 12 Vdc and 5 Vdc

Agencies UL certification for North

America only

Temperature

range

0°C to 45°C

(32°F to 113°F)

Humidity 80%, non-condensing

Class I,

Division 2

The KVM Extender Receiver is

approved for Class I, Division

2 hazardous areas in North

America.

The KVM Extender Transmitter

is not certified for hazardous

usage and must be installed

in a safe area or enclosed in

an approved enclosure (such as a purged housing or cabinet).

NEMA 4X Not approved

Display Monitor Specifications

Advantech 10" Display (ANA-D3510-100-A1)

Screen Size 10" diagonal

Type LCD with LED back light

Industrial hardened

Yes

Mounting

Styles

Face Mount

19" Rack Mount

Panel Mount

Independent Mount

Power 24 Vdc power supply included. (Permissible voltage range 10 Vdc to 28 Vdc)

Inrush Current: 3.5 A @ 24 V (< 500 µs)

Operating Current: < 500 mA

Agencies CE, UL, CUL

IP54 Designed for.

Class I, Div 2 Yes

ATEX/IECEx Yes

Temperature -20°C to 65°C (-4°F to 149°F)

Operating Temperature.

The minimum temperature rating is -20°C (-4°F) for the screen, front bezel, and rear electronics. When the screen or front bezel is exposed to temperatures below -20°C (-4°F), a heated enclosure is required.

Humidity 10% to 85% RH noncondensing

Touch

Interface

GFG Resistive Touch Screen

Manufacturer Advantech

Dimensions (W x H x D)

387.4 mm (15.25 in) x 248.9 mm (9.8 in) x 49.0 mm (1.93 in)

Panel Cutout: 342.9 mm (13.5 in) x 228.6 mm (9.0 in)

Weight

Shipping

4.0 kg (8.78 lb)

Warranty One year

Recommended for industrial use.

Certified for hazardous locations.

The 10" housing is designed for IP54 ingress protection against dust and water spray

Ordering Considerations

Firmware, Software, and Hardware

Requirements

The 3500/94M requires the 3500/22 Transient Data Interface (TDI) module. It also requires these or newer versions of the following firmware and software:

3500/94M Firmware 4.06, Rev. C

3500/22 Firmware (TDI) Rev 1.71

3500/01 Software (Rack Config) Rev 5.6

3500/02 Software (Op Display) Rev 2.21

3500/03 Software (Data Acquisition) Rev 1.22

The 3500/94M requires the following hardware:

3500/22 TDI - Transient Data Interface

