

I/A Series® Hardware Model P93 Workstation for Windows® Windows NT® Operating System



The Model P93 Workstation is a Pentium 4 PC with Windows NT 4.0 operating system. It can be used with I/A Series or Wonderware workstation software. It can also provide a platform for Invensys, third-party and user-written applications.

The Model P93 Workstation, with available Foxboro I/A Series AW70, WP70, WINAPP, WINHST, or model coded station software licenses can:

- Host I/A Series control stations
- Support data communications to directly connected process I/O devices
- Serve as an application platform
- Serve as a human to machine interface (HMI) station
- Function on Ethernet or Nodebus-based control systems.

As a multipurpose workstation running the Windows NT operating system, the Model P93 Workstation supports execution of system applications, data communications for a broad range of applications, file serving capabilities, and display of graphics and text. It also interfaces with corporate networks at a local or worldwide level.

The Model P93 Workstation supports one or two monitors (purchased separately), a mouse or optional trackball, and an alphanumeric keyboard.

The Model P93 Workstation features a choice of Enhanced Internal Device Electronics (EIDE) or Small Computer System Interface (SCSI) hard disk drive and up to 1 GB of ECC RAM memory. The processor supports the following internal devices: a system hard drive, a CD-RW drive, and an optional tape backup drive. The floppy disk controller supports one disk drive.

Client/server communication is accomplished using the TCP/IP networking protocol with the integrated network port or optional network interface card (NIC).

As symbolized by the **CE** logo, the Model P93 Workstation conforms to the applicable European Union directives.

To interface with an I/A Series Nodebus work, the Model P93 Workstation requires an Ethernet network interface card and a Dual Nodebus 10BaseT Interface (DNBT) module or Dual Nodebus Interface Extender (DNBX) module.

The Model P93 Workstation contains the following elements:

- Intel® Pentium® 4 processor
- 256 MB ECC RAM (expandable to 1 GB)
- Parallel interface port for printer
- Internal, 3.5-inch, 1.44 MB disk drive
- AGP video slot

- Two serial interface ports for:
 - Dual Nodebus 10BaseT Interface (DNBT)
 - Dual Nodebus Interface Extender (DNBX)
 - Printers
 - Other serial devices
- Internal EIDE or SCSI system hard drive
- Internal CD-RW drive
- Integrated audio
- Integrated 10/100BaseT Ethernet port
- PS2 Mouse and keyboard.

The Model P93 Workstation offers the following options:

- Internal tape backup drive
- One Ethernet network interface card
- One multi-port serial expansion card (4 ports)
- Allen-Bradley® PKTX interface card for Allen-Bradley Data Highway Plus™
- Dual monitor graphics card
- Trackball.

FUNCTIONAL SPECIFICATIONS

Processor Type

Intel Pentium 4 processor

Memory

256 MB ECC RAM standard (512 MB, 768 MB, or 1 GB RAM optional)

Devices Served

PERIPHERALS

EIDE 20 GB hard drive or SCSI 18 GB hard drive
10/20 GB tape drive (EIDE or SCSI)
CD-RW

CONTROLLER PERIPHERALS

One internal, 1.44 MB, 3.5-inch disk drive

AGP VIDEO INTERFACE*

- Single Card – supports one monitor
- Optional Dual Card – supports two monitors

INTERFACES TO EXTERNAL DEVICES

- PS/2 bus mouse or optional trackball
- PS/2 alphanumeric keyboard
- Serial interface for printer (alarms/text)
- Dual Nodebus Interface (DNBT)
- Dual Nodebus Interface Extender (DNBX).

Internal Diagnostics

Self-checking is performed at power-up.

Screen Presentation

REFRESH RATE

Up to 85 Hz

COLORS

Up to 65536**

RESOLUTION

Up to 1600 x 1200 pixels

Video Output

TYPE

VGA analog RGB with horizontal and vertical sync

* For information on available monitors, refer to PSS 21H-4D1 B3, Workstation Components.

**May be limited by specific software specifications

FUNCTIONAL SPECIFICATIONS (Cont.)**Two Serial Interface Ports****TYPE**

EIA RS-423 (RS-232-C compatible)

One Parallel Interface Port

Centronics interface for printer

Ethernet Interface Communications

- PCI Ethernet network interface card providing connection to Ethernet data bus (AUI, 10Base2/5, and 10/100BaseT)
- Integrated Ethernet port (10/100BaseT)

Nodebus Interface Communications**TYPE**

IEEE 802.3 data bus and EIA RS-423 control bus*

MAXIMUM DISTANCE FROM NODEBUS

- 100 m (330 ft) – using Dual Nodebus 10BaseT Interface Module (DNBT)
- 450 m (1500 ft) – using Dual Nodebus Interface Extender Module (DNBX)

Power Requirements**INPUT POWER**

- 115 or 220 V ac (nominal), manual select
- 47 to 63 Hz

POWER CONSUMPTION

250 W maximum

* Refer to PSS 21H-7B2 B4, Dual Nodebus Interface and Dual Nodebus Interface Extender, for information on how the control bus is used.

ENVIRONMENTAL SPECIFICATIONS**Operating****TEMPERATURE**

10 to 35°C (50 to 95°F)

RELATIVE HUMIDITY

20% to 80%, noncondensing

Storage**TEMPERATURE**

-40 to + 65°C (-40 to +149°F)

RELATIVE HUMIDITY

20% to 80%, noncondensing

REGULATORY COMPLIANCE**Safety Certifications****USA**

UL (UL Std 1950)

CANADA

CSA (CSA C22.2 No. 950)

EUROPE

TUV (CENELEC EN60950)

EMC**USA**

FCC Part 15

CANADA

DOC

EUROPE

EN55024, EN61000-3-2, EN61000-3-3, and EN55022

PHYSICAL SPECIFICATIONS**Dimensions and Mass****PROCESSOR***Height*

426 mm (16.8 in)

Width

180 mm (7.1 in)

Depth

447 mm (17.6 in)

Mass

12.7 kg (28 lbs)

Dimensions and Mass (Cont.)**KEYBOARD***Height*

50.7 mm (2.0 in)

Width

456 mm (18.0 in)

Depth

171 mm (6.75 in)

Mass

1.8 kg (4.0 lbs)

33 Commercial Street
Foxboro, Massachusetts 02035-2099
United States of America
www.foxboro.com
Inside U.S.: 1-866-PHON-IPS (1-866-746-6477)
Outside U.S.: 1-508-549-2424 or contact your local Foxboro representative.
Facsimile: 1-508-549-4999

Foxboro, I/A Series is a trademarks of Invensys Systems, Inc.
Invensys is a trademark of Invensys plc.
Windows and Windows NT are registered trademarks of Microsoft Corporation.
Intel and Pentium are trademarks of Intel Corporation.
Allen-Bradley and Data Highway Plus are trademarks of Allen-Bradley Company.
All other brand names may be trademarks of their respective companies.

Copyright 2001-2002 Invensys Systems, Inc.
All rights reserved