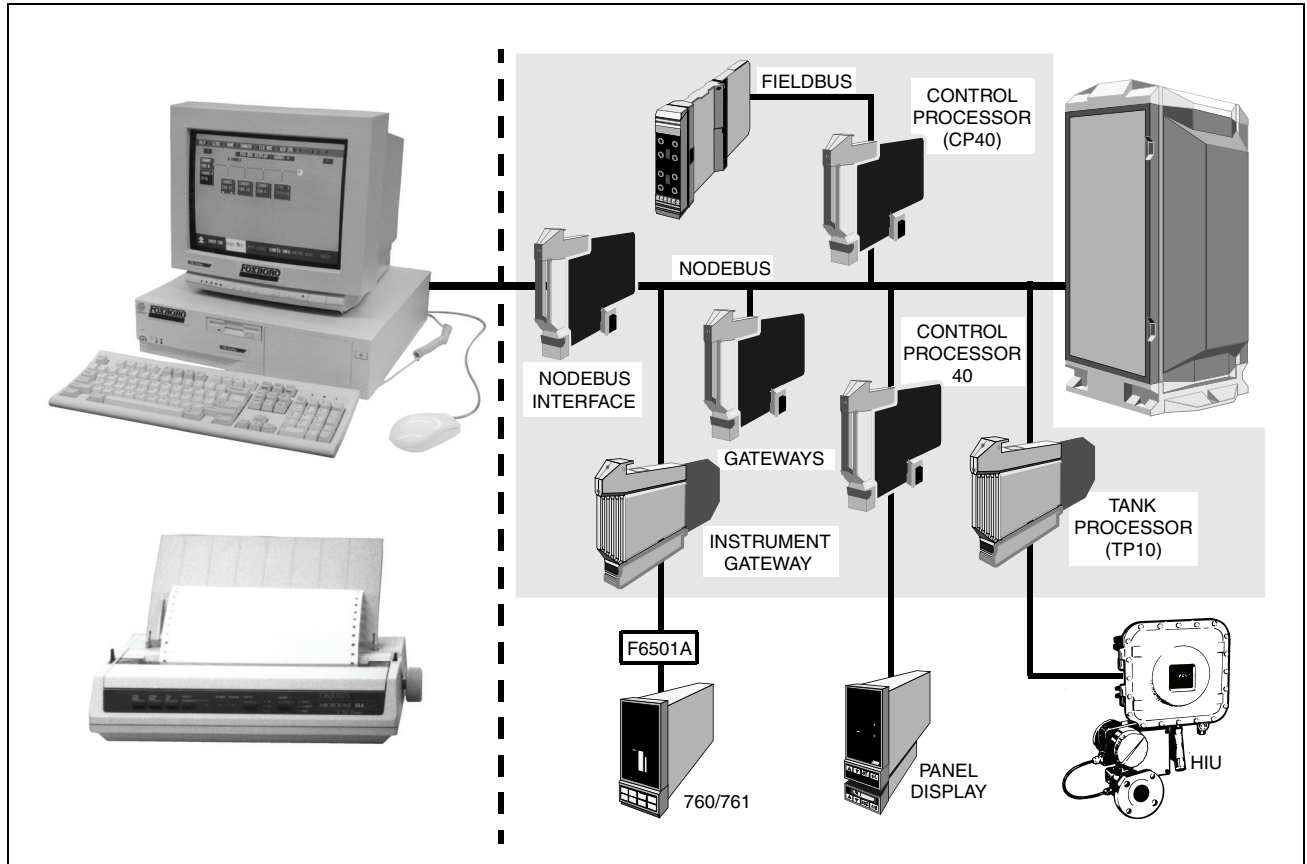


I/A Series® Hardware Personal Workstation for Small Nodebus Control System (PW-NB)



The I/A Series system supports the use of Personal Workstations (PW's) for a wide variety of functions. I/A Series software is compatible with qualified Pentium class personal computers. The Foxboro Company provides Personal Workstation based solutions, which include personal computer hardware and I/A Series software packages to match the intended use and capacity of the Personal Workstation.

On the migration path from the smallest PW system to the largest I/A Series system is the PW hosted node, which provides a small distributed control system capability. In this case, the PW-NB performs as an Application Processor and a Workstation Processor.

The PW-NB can host any combination of supported nodebus devices. Nodebus devices supported include:

- Control Processor 10's
- Control Processor 30's
- Control Processor 30's with Panel Display Stations
- Control Processor 40's
- Information Network Interface 15's
- Tank Processor 10's
- Communications Processor 10
- Gateways
- Personal Workstations for Operating and Engineering (PW-OE).

Workstation Processors and LAN Interfaces are not required in a PW-NB system configuration and therefore are not supported. Supervisory level functions include an optional Historian and Spreadsheet software package.



NODEBUS INTERFACE

The PW-NB requires a PW Nodebus interface card. The card is connected by an AUI (Access Unit Interface) cable (up to 45 m [150 ft]) which connects to a Nodebus interface module in an I/A Series enclosure. In this configuration, the PW functions as a station on the Node.

SOFTWARE

The software supplied with each personal workstation includes:

- Operating System (with Workstation Processor and Application Processor functions)
- System Monitor
- System Management Display Handler
- Display Builder, Display Configurator, and Display Utilities
- System Configurator
- Device Monitor
- Integrated Control Configurator
- Compound Summary Access
- Real-Time Relational Database
- Operator Message Interface

NOTE

Only one Compound Summary Access, Device Monitor, and System Configurator software package can reside on the network.

Optional software that may be operated within the workstation includes:

- Historian 20 (up to 500 points)
- 760 Series Controller Configurator
- 761 Series Controller Configurator
- Mathematics Library
- Physical Properties Library
- SPC (Statistical Process Control)
- Automation Equipment Manager
- AEM Display
- Process Optimizer
- Remote Alarm Message Server
- Remote Alarm Message Dispatcher
- Spreadsheet
- Report Writer 20

Software languages supported are C and FORTRAN.

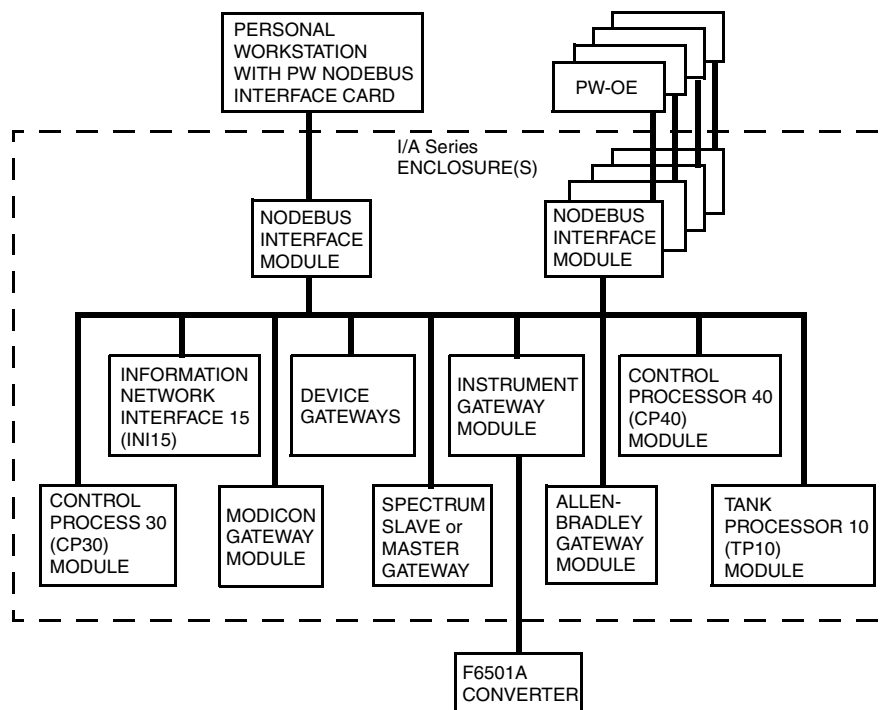


Figure 1. Nodebus Interface Configuration

FUNCTIONAL SPECIFICATIONS

Personal Workstation and Peripherals

FOXBORO PENTIUM

- Intel Pentium microprocessor, 100 MHz
- 8 MB RAM
- Main processor board interfaces: VGA (video), parallel printer, serial printer, serial mouse/trackball, floppy disk
- 504 MB hard disk: IDE interface
- 1.44 MB 3.5-inch floppy disk
- 14-inch, 15-inch, 17-inch, or 19-inch VGA monitor
- Windows 95 keyboard, English language
- Annunciator and touchscreen NOT available with PW systems

POINTING DEVICE

Standard serial mouse, optional trackball, or optional Industrial trackball

PRINTER

Standard dot matrix printer 80 column, optional dot matrix printer 132 column or color postscript printer

Nodebus

MAXIMUM LENGTH

Without Extenders
30 m (100 ft)

With Extenders(a)
697 m (2300 ft)

MAXIMUM NODEBUS SEGMENT LENGTH

30 m (100 ft)

CONFIGURATION LIMITATIONS

Not more than two Nodebus extender pairs may exist between stations communicating over the same logical Nodebus path.

PERSONAL WORKSTATION TO ENCLOSURE

- 45 m (150 ft) maximum
- 3 m (10 ft) cable
- 15 m (50 ft) cable
- 45 m (150 ft) cable

Documentation

I/A Series Hard Copy Documentation (Electronic Documentation on CD-ROM optional; requires separate Windows PC)

Power Requirements - Personal Workstation

MONITOR INPUT VOLTAGE

120 to 240 V ac, 47 to 63 Hz, auto-switching

MONITOR POWER CONSUMPTION

100 W maximum

DESKTOP UNIT INPUT VOLTAGE

120 to 240 V ac, 47 to 63 Hz, manual switching

DESKTOP UNIT POWER CONSUMPTION

150 W maximum

(a)Includes Nodebus segment lengths and length of cable interconnecting Nodebus segments.

PHYSICAL SPECIFICATIONS - Personal Workstation

Dimensions (approximate)

KEYBOARD

Height
38.1 mm (1.5 in)
Width
457.2mm (18 in)
Depth
168.4 mm (6.63 in)
Mass
1.4 kg (3.1 lbs)

SYSTEM UNIT

Height
114 mm (4.5 in)
Width
438 mm (17.3 in)
Depth
414 mm (16.3 in)
Mass
8 kg (18 lbs)

14-INCH DISPLAY

Height
316 mm (13.7 in)
Width
348 mm (13.7 in)
Depth
371 mm (14.6 in)
Mass
11 kg (24 lbs)

15-INCH DISPLAY

Height
370 mm (14.57 in)
Width
365 mm (14.37 in)
Depth
384 mm (15.12 in)
Mass
15 kg (32 lbs)

17-INCH DISPLAY

Height
438 mm (17.24 in)
Width
418 mm (16.46 in)
Depth
469 mm (18.46)
Mass
21 kg (47 lbs)

19-INCH DISPLAY

Height
474 mm (18.8 in)
Width
474 mm (18.8 in)
Depth
502 mm (19.5 in)
Mass
30 kg (66 lbs)

ENVIRONMENTAL SPECIFICATIONS**Personal Workstation****OPERATING(a)**

Temperature

10° to 35° C (50° to 95° F)

Relative Humidity

15% to 80%, noncondensing

STORAGE

Temperature

-10° to +60° C (-14° to +140° F)

Relative Humidity

10% to 90%, noncondensing

I/A Series Modules(b)**OPERATING**

Temperature

0 to 60° C (32 to 140° F)

Relative Humidity

5 to 95% (noncondensing)

Altitude

-300 to +3,000 m (-1,000 to +10,000 ft)

STORAGE

Temperature

-40 to +70° C (-40 to +158° F)

Relative Humidity

5 to 95% (noncondensing)

Altitude

-300 to +12,000 m (-1,000 to +40,000 ft)

Environmental Contamination Level

I/A Series MODULES

Class G3 (harsh) as defined in ISA Standard S71.04.

(a) Operating temperature and humidity ranges may vary with data storage media.

(b) The environmental ranges can be extended by the type of I/A Series Enclosure containing the module. Refer to applicable Product Specifications Sheet (PSS) which describes the specific enclosure that is to be used.

REGULATIONS - Personal Workstation

Meets or exceeds the following requirements:

Safety

US

UL (UL Std 1950)

CANADA

CSA (C22.2 No. 950)

EUROPE

TUV(CENELEC EN60950)

EMI/RFI

US

FCC Class B

CANADA

DOC, Class B

EUROPE

EN55022, 1988; EN50082-1; 1992

SERVICES(a)

Foxboro will provide the services of a Field Service Representative to verify the correctness of the installation. This includes system power, connection of interconnecting cables, and loading of system modules and components, if required. Additionally, the Service Representative will apply power to the system and verify that the hardware and standard operating system software perform in accordance with system specifications.

A Maintenance Agreement is provided during the Standard Warranty period. Included with this agreement are telephone services and software revisions, when issued.

TRAINING(a)

"Introduction to I/A Series Small Systems" is a self-study training package designed to train plant or mill personnel in the operation and configuration of I/A Series PW-FB and PW-NB Systems. It consists of a 4-1/2 hour video program, a training manual and software which runs on PW-FB or PW-NB Systems. The material is presented in 12 modules which can be used to train process operators, technicians, and engineering personnel. NOTE: PW-NB systems must include a control processor to perform the training.

- Exploring Personal Workstation Hardware
- I/A Series Software Terms and Concepts
- Operation of the I/A Personal Workstation
- Controlling a Process with the I/A Series Personal Workstation
- Exploring the Personal Workstation's Configuration Software
- Configuring the Process Control Subsystem
- Introduction to Group Display Configuration
- Introduction to File Utilities
- Introduction to Environment Configuration
- Introduction to Creating Process Displays
- Introduction to Historian Configuration and Report Writing
- Introduction to the I/A Series Spreadsheets

NOTE: The self-study training packages and additional training manuals must be purchased separately.

Part Numbers: B0193EW - Complete Package

B0193EY - Additional Manual

For specifications on the I/A Series enclosures, Fieldbus Modules, software, and printers, refer to the applicable I/A Series Product Specification Sheet (PSS).

(a)Details of services and/or training may vary depending on geographic location. Refer to your Sales/Service Representative for further information.

The Foxboro Company

33 Commercial Street
Foxboro, Massachusetts 02035
United States of America
Telephone (508) 543-8750

Foxboro, I/A Series, and SPECTRUM are registered trademarks of The Foxboro Company.

Siebe is a registered trademark of Siebe, plc.

Intel is a trademark of Intel Corporation.

Copyright 1992-1996 by The Foxboro Company
All rights reserved