

Series 30/40 PLC Workstations

As a cost-effective replacement for many devices, the Series 30 and 40 PLC workstations can function as a

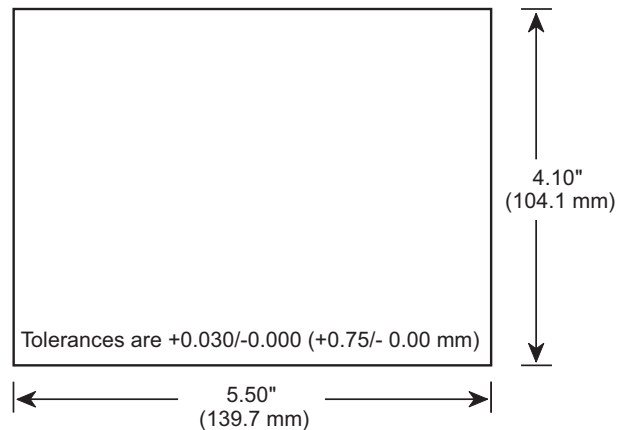
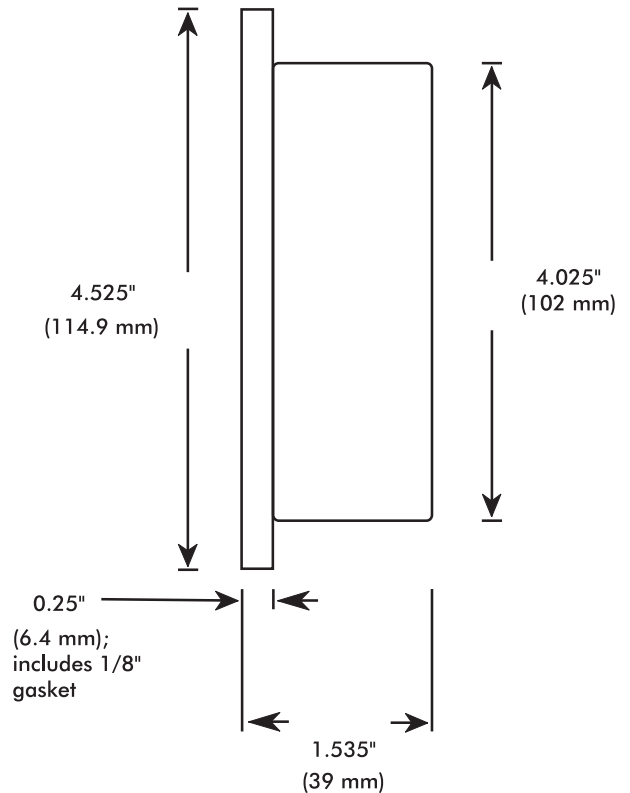
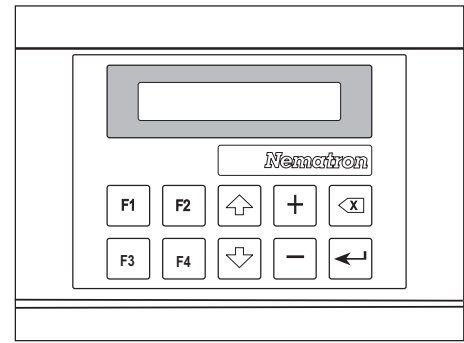
Features

- Fill-in-the-blanks PC-based setup
- Descriptions and operator units make each location's function apparent
- Minimum and maximum operator entries reduce operator errors
- Alarm monitoring and reporting improves system diagnostics
- High-contrast two-line flat panel display with LED backlighting on the Series 30
- Two-line vacuum fluorescent display on the Series 40

PLC operator interface, as operator terminals, and as industrial computers programmed with BASIC. These workstations save on costs for I/O modules, ladder programming, and installation. To set up one of these workstations, simply

run a fill-in-the-blanks program on a PC, download the entries to the workstation, and plug it into a PLC networking port.

As an industrial computer with BASIC, the Series 30/40 performs many operator interface, communications, data storage, data manipulation, and data acquisition functions. As an industrial terminal, the Series 30/40 provides a remote keypad and message display to any intelligent host device that communicates through a serial port. With a broad operating temperature range, watertight front panel, and a maintenance-free design, the Series 30/40 PLC workstations meet a variety of applications needs.



Nematron[®]
Open minds. Open systems. Real solutions.

As a PLC workstation, the Series 30/40 is widely compatible

Allen-Bradley

- SLC-5/03 and SLC-5/04 (DF1)
- SLC 100/150/500 Series (DH-485)
- PLC-2, PLC-3, PLC-5 (DF1) - Data Highway
- MicroLogix 1000 (DF1)

Siemens

- S5-90, 95, 100, 102, 103, 115, 135 (3964R)
- SIMATIC/TI 305/435, 500/505 Series

GE Fanuc

- Series Ninety (SNP)
- Series 1, 3, 5, 6, 1Jr., 1Plus, Micro (CCM-2)

Modicon

- Modbus protocol RTU-ASCII

Square D

- 100, 300, 400, 500, 600, 700 (Sy/Max)

Omron

- Host-Link models, C and SP Series

Telemecanique

- TSX-17, TSX-27, TSX-47 (Uni-Telway)

Hitachi

- H Series

IDEC

- Micro-1, FA-1, FA-2, FA-3, Micro-3

Koyo

- DL330, DL340, DL430, DL440

Mitsubishi

- Series A, F, FX

Toshiba

- M, EX, and T Series

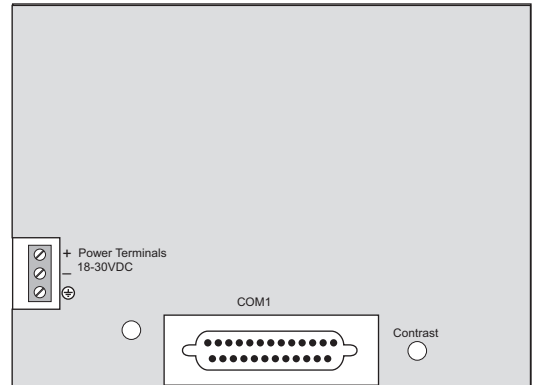
Westinghouse

- 700, 900, 1100, 1200, 1250

Cables are available to connect the Series 30/40 to most popular PLC drivers. Contact your local distributor or the factory.

Communications

Every unit includes a rear COM1 serial port for RS-232, RS-422, and RS-485 communications.



PLC Workstation Features

- Operators can easily view and change up to 200 registers, timers, counters, contacts, and coils (with 128K Flash)
- Set up additional functions, including alarm annunciation and recipe entry

Specifications

Power

- 18-30V DC, 2.5 watts

Display

- Series 30: Two-line liquid crystal with LED backlighting; two lines x 20 characters
- Series 40: Two-line vacuum fluorescent; two lines x 20 characters

Dimensions

- 5.925" W x 4.525" H x 1.535" D (150.5 mm x 114.9 mm x 39.0 mm)

Memory

- **Series 30:** 64 KB flash EPROM standard, 128 KB optional; 32 KB RAM.
- **Series 40:** 128 KB flash EPROM standard; 32 KB RAM.

Keyboard

- Ten membrane keys with replaceable legends.

Communication

- RS-232/RS-422/RS-485, 25-pin connector.
Supports baud rates 300, 600, 1200, 2400, 4800, 9600, and 19200

Temperature

- For IWS-30: 0°-50°C
- For IWS-40: 0°-60°C

Relative humidity

- 20%-80%, non-condensing

Operational Vibration

- 5-10 Hz 0.2" (p-p)
- 10-500 Hz, 1G

Shock

- 30G/18 msec, operational

Front Panel Seal

- Designed to meet NEMA 4 requirements when properly installed in an enclosure

EMC Compliance:

- FCC Part 15, Class A
- EN55022, Class B
- IEC-801-2, Level 4
- IEC-801-3, Class 3
- IEC-801-4, Level 4
- CE Mark, EU EMC/Directive 89/336/EEC

Switch Gears and . . .



. . .use the 30/40 as an Industrial Terminal

- **Message storage and retrieval**—The host can transmit a short command to recall one of as many as 255 messages stored in the terminal's memory. This function reduces the communications overhead to display a message to the operator.
- **Multidrop communications**—You can connect multiple terminals to a single host via the unit's RS-422/RS-485 serial communications port. Connect as many as 250 terminals on a single pair of twisted wires.
- **Compatible with commands for many other terminals**

. . .or, use it as an Industrial Computer with BASIC

- **Powerful BASIC language** similar to GW-BASIC
- **Create custom serial communications drivers**—intelligent devices such as transducers, counters, and single-loop controllers
- **Collection and data storage**
- **Data manipulation**

FLASH Memory for All

Each 30/40 supports all three NEMAs of firmware in flash memory: industrial terminals, industrial computers, and PLC workstations.



How to Order

IWS-30	2-line/64K flash, LCD display
IWS-30/CP	2-line/64K flash, LCD display with setup software
IWS-40	2-line/128K flash, vacuum fluorescent display
IWS-40/CP	2-line/128K flash, vacuum fluorescent display with setup software
IWS-SETUP-30	Setup software and cable, Series 30/40, all drivers except SLC-500 (RS-485)
IWS-SETUP-BP-30	Setup software and cables (Series 30 and 40) for using BASIC programming language
COM-ABN-30	Allen-Bradley SLC-500 (RS-485) driver kit from Series 30/40 to AB SLC-500 DH-485 network adapter
COM-ABS-30	Allen-Bradley SLC-500 (RS-485) driver kit from Series 30/40 to AB SLC-500 programming port
IWS-30/M	Box of ten Series 30 Workstations, bulk-packed to reduce your cost
IWS-40/M	Box of ten Series 40 Workstations, bulk-packed to reduce your cost

About Nematron

Nematron Corporation (Ann Arbor, MI) is located close to Detroit and the core of the world's largest automotive manufacturing centers. This location allows us to cooperatively develop open architecture manufacturing applications. We are a publicly held company listed on the NASDAQ National Market System (TICKER:NEMA).

Nematron pioneered the operator interface segment of factory automation fifteen years ago with the Industrial Workstation and now leads worldwide in designing, manufacturing, and supplying high-quality Intel-based industrial automation solutions—a wide range of rugged and reliable hardware products from low-cost operator interface to high-performance Industrial Control Computers. The Industrial Control Computers, based on Intel's Pentium® and Pentium Pro processors, are the fastest industrial computers available today.

Nematron hardware withstands the rigors of plant-floor use such as high humidity, machine shock and vibration, and airborne contaminants, and meets specifications for use in hazardous locations. In addition, our products meet the stringent requirements of Europe's CE mark. We have a worldwide sales and support organization and an installed base of over 80,000 systems in discrete manufacturing and continuous process environments. Nematron offers a complete systems approach to factory automation, leading the shift away from proprietary control systems towards higher performance, lower-cost, open architecture PC-based solutions that execute on Microsoft's Windows NT platform.

For more about Nematron or our products, call (313) 994-0501, e-mail info@nematron.com, or visit our Web site at <http://www.nematron.com>.

Nematron®

Open minds. Open systems. Real solutions.

5840 Interface Drive, Ann Arbor, MI 48103

Phone: 313-994-0591, Fax: 313-994-8074

1-800-NEMATRON

DOC-DAS-118, Rev C

© Nematron Corporation. All rights reserved. Printed in the United States of America. Specifications subject to change without notice. Nematron, NemaSoft, PowerVIEW, FloPro, and AutoNet are registered trademarks of Nematron Corporation. Industrial Control Computer, OpenControl, Paragon, and Industrial Workstation are trademarks of the Nematron Corporation. All other brand and product names are trademarks or registered trademarks of their respective companies.

