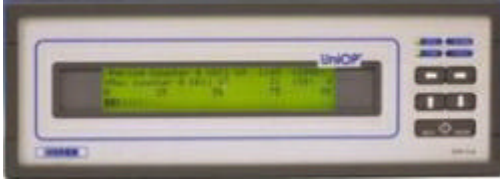


# UniPlus - Industrial PLC Workstation

## UniOP™ - Universal Operator Panel Family



- 2 or 4 Line x 40 Character VFD or LCD
- Keyboard Macro Editor
- Recipe Capabilities
- UniNET Networking Capabilities
- Links Directly to PLC Programming Port
- Optional External Keypad
- NEMA 4/12 Compliant Enclosure

### **The EF-02(04) and ER-04 models fulfill the need for a powerful yet cost effective operator interface system.**

Displays are available with two or four lines and your choice of a LCD or VFD display. Each line can contain up to 40 characters. Each page can contain up to 32 lines which can be accessed by scrolling with the arrow keys. The ER-04 LCD display has a contrast control and the EF-02(04) has a brightness control. This control is provided to adjust the display for easy viewing under nearly any condition.

### **Display Variables**

PLC internal variables can be shown on any of the many display pages. The number of variables that can be viewed at one time is limited only by the display size. UniOP also provides scaling (linear conversion) of the displayed data. The final value can then be shown in several useful formats including bargraph, date, time, decimal, bit, hexadecimal, floating point, and string. Data entry with valid range verification is also available for each data type.

### **Data Entry**

The optional external keyboards (models AT-F or ET-F) add several pushbuttons and user LEDs to the display panel. Slide-in legends make it easy to customize and document the operation of each key and indicator.

UniOP also features an internal battery-backed real time clock. Time and date information from the clock are periodically updated in the PLC to enable processing based on time-of-day, day-of-week or any other period.

### **Security**

An eight-level password protection scheme protects critical system features from undesired access.

### **Alarms**

UniOP can monitor and display up to 1024 alarms. Attributes and unique messages for each alarm can be defined. Operator acknowledgment can also be required. The last 256 alarm events detected by the UniOP are retained in an internal event list. This list can be viewed on screen or printed on a serial printer to obtain a permanent record.

### **Adaptability**

Custom display screens are developed using the UniOP Designer<sup>®</sup> for Windows<sup>®</sup> programming software. Your completed project file can be downloaded to the display through the serial port and permanently stored in a Flash EPROM.

### **Keyboard Macro Editor**

A feature that allows you to configure your UniOP keys to do a variety of functions locally in the UniOP. For example: turning pages, setting attributes, setting LEDs, writing to the PLC, going to the alarm list, uploading or downloading a recipe set and many more. This can save many hours of ladder logic programming.

### **Recipes**

This feature allows you to create a recipe with up to 255 parameter sets for each page of the project file. UniOP has a total

of 16K reserved for recipe storage. You can upload or download a parameter set from or to the PLC. Once a parameter set has been downloaded to the PLC, the data contained within the parameter set can be modified.

## UniNET Network

The UniNET network allows you to design networks of varying configurations; from two panels with one PLC to multiple panels with multiple PLCs. Data can be written to or retrieved from the PLCs in many different locations at one time. The UniNET network creates a bridge between UniOP panels which allows data to be shared by all PLCs in the network, regardless of the type or manufacturer.

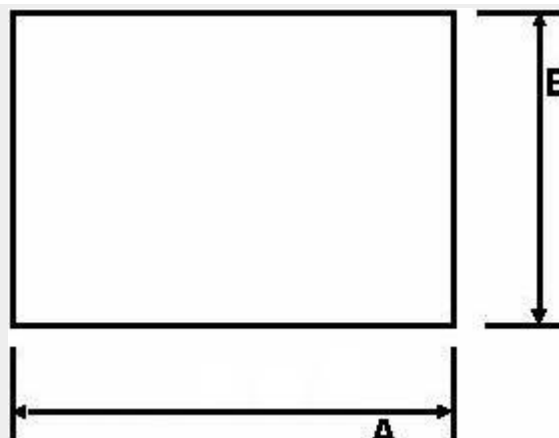
## Important Features

- NEMA 4/12 compliant enclosure
- CE approved
- UniNET network capabilities
- Keyboard Macro Editor
- Recipe configuration
- One RS-232 / RS-422 / RS-485 / 20mA current loop serial port, speeds up to 38,400 baud for direct PLC connection
- One RS-232 port for PC or printer communications
- One auxiliary port for high speed bus network communications
- 128 KB internal memory standard Flash EPROM
- Unlimited number of variables per page
- 1024 prioritized alarms
- Historical event list (last 256 events)
- Eight-level password protection
- Prints reports, alarm list, and event list to serial printer
- Displays ASCII standard character set
- Optional external keyboards, ET-F or AT-F
- Real time clock with battery back-up

## Specifications

Physical Dimensions	
Cutout Width and Height	See drawing below
Cutout Depth	80 mm (3.15")
Front Panel Thickness (max.)	9 mm (0.35")
Faceplate height	111 mm (4.37")
Faceplate Width	311 mm (12.24")
Weight	2.0 kg (4.4 lb)
Environment	
Operating Temperature	0 to 50 °C (32 to 122 °F)
Humidity	0 to 95% RH (non-condensing)
Power Requirements EF-02	500 mA maximum, 24 VDC
Power Requirements EF-04	700 mA maximum, 24 VDC
Power Requirements ER-04	400 mA maximum, 24 VDC
Display	
Type	Liquid Crystal
Size	4 lines x 40 characters/line
Character Height	5.15 mm (13/64 inch)
Type	Vacuum Fluorescent
Size	2 or 4 lines x 40 characters/line
Character Height	5.9 mm (15/64 inch)
Keypad	
Technology	Tactile feedback (tested 5M times)
Warranty	
All products are warranted for one year against defects in material and workmanship.	
Ordering Information	
Description	Part No.
VFD, 2 x 40	EF-02
VFD, 4 x 40	EF-04
LCD, 4 x 40	ER-04

### Panel Cutout Dimensions



**Cutout Ax B 293x148 mm or 11.54x5.83"**