UniPlus - Industrial PLC Workstation

UniOP™ - Universal Operator Panel Family

- 4 x 20 LCD or 2 x 20 VFD Display
- Numeric Keypad
- 19 Programmable Keys
- Keyboard Macro Editor
- Recipe Capabilities
- UniNET Networking Capabilities
- Small Size for Tight Space Requirements
- Links Directly to PLC Programming Port
- NEMA 4/12 Compliant Enclosure

The MD02F-02 and the MD02R-04 fulfill the need for a powerful yet cost effective operator interface system in areas where space and cost must be small. Displays are available in either a four line backlit LCD or a two line VFD. Each line can contain up to 20 characters. Each page can contain up to 32 lines, which can be accessed by scrolling with the arrow keys. Brightness 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 (limited only by memory size). 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 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 integral keypads on the MD02R-04 and the MD02F-02 offer 19 programmable keys and 9 user LEDs. Slide-in legends make it easy to customize and document the operation of the numeric keys and the user LEDs.

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 sent to a serial printer to obtain a permanent record.

Adaptability
Custom display screens are developed using the UniOP Designer™ for Windows™ 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

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

- 19 programmable keys
- 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
- Real time clock with battery back-up

Specifications

Physical Dimensions

Cutout Width and Height	See drawing below
Cutout Depth	79 mm (3.11")
Front Panel Thickness (max.)	8 mm (0.31")
Faceplate height	98 mm (3.85")
Faceplate Width	195 mm (7.68")
Weight	0.9 kg (2.0 lb)

Environment

Operating Temperature	0 to 50 °C (32 to 122 °F)
Humidity	0 to 95% RH (non-condensing)
Power Requirements (MD02R)	250 mA maximum, 24 VDC
Power Requirements (MD02F)	250 mA maximum, 24 VDC

Display

Type	Liquid Crystal
Size	4 lines x 20 characters/line
Character Height	5.15 mm (13/64 inch)
Type	VFD
Size	2 lines x 20 characters/line
Character Height	5.9 mm (15/64 inch)

Keypad

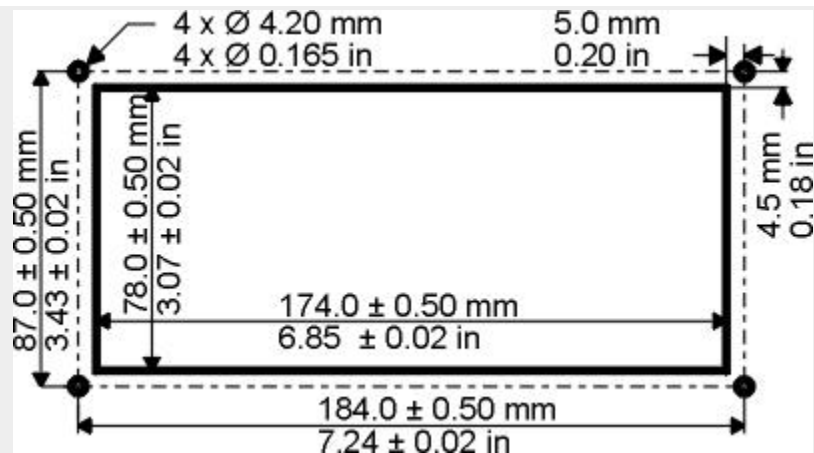|	
Technology	Tactile Feedback (tested 5M times)

Warranty

All products are warranted for one year against defects in material and workmanship.

Ordering Information

Description	**Part No.**
VFD, 2 x 20, 19 programmable keys	MD02F-02
LCD, 4 x 20, 19 programmable keys	MD02R-04

Panel Cutout Dimensions

Specifications subject to change without notice