Tech-note

UniOP ePAD03 and ePAD04

Compact low-cost HMI with graphic display. The ePAD03 and ePAD04 panels are defining a new standard for entry-level HMI products. They are the ideal replacement for the successful MD00 Series.
These products are also available with extended operating temperature range for use in extreme environmental conditions.

- Monochrome graphic display 120x32 pixels
- Downloadable fonts
- Scalable text
- 4 user programmable function keys with slide-in legends
- 5 user programmable LED indicators
- Dual-driver communication
- Connection to industrial bus systems and Ethernet with optional modules
- IP65 front panel protection
- Version with extended operating temperature available

Highlights

The ePAD03 and ePAD04 HMI panels are compact low cost products yet extremely rich in functionality. The ePAD03 and ePAD04 are the ideal replacement for panels of the MD00 Series. They generally outperform the equivalent products and can be used in all cases except when the 20 mA current loop interface is needed.
The products support the rich common functionality of the UniOP operator panels:

- Powerful and intuitive programming with the UniOP Designer 6 software
- Dual-driver communication capability
- Support of more than 130 communication drivers for industrial devices
- Optional modules for fieldbus systems (Profibus DP, CANopen, DeviceNet, Interbus) and Ethernet. Ethernet modules allow connection to field devices as well as programming the HMI from Designer.
- Scalable fonts for effective presentation of information.
- Display dynamic data in numerical, text, bargraph and graphic image formats
- Recipe data storage. Recipe data can be transferred to an host computer using the Ethernet connection.
- Multilanguage applications. The number of runtime languages is limited only by the available memory. All text information in the application can be exported in Unicode format for easier translation.
- Powerful macro editor to configure keypad operation
- Alarms and historical alarm list. Alarm and event information can be printed or transferred to an host computer using the Ethernet connection.
- Eight level password protection.
- Ethernet-based UniNet network to share data between UniOP HMIs and to serve data using UniNet OPC Server.

Technical Data

Display	
Type	Monochrome LCD
Resolution	120x32
Rows/columns	4x20
Scalable fonts	Yes
Active display area	70x21 mm
User definable characters	256
Backlight	LED
Contrast regulation	Software
Memory	
User memory	512 KB Flash
User memory expansion	-
Front panel	
Touch screen	-
Function keys	4, with slide-in legend
System keys	7
User LED's	5
System LED's	4
Interfaces	
PC/Printer port	-
PLC port	RS-232, RS-485, RS-422
Aux port (fieldbus and Ethernet)	Yes, with optional modules
Serial programming speed	ePAD03 9600 – 38400 bps ePAD04 9600 bps
Functionality	
Number of variables per page	Unlimited
Dual driver capability	ePAD03 Yes ePAD04 No
Recipe memory	ePAD03 16 KB ePAD04 -
UniNet network	ePAD03 Client/Server ePAD04 Client
Alarms	1024
Event list	ePAD03 256 ePAD04 -
Password	Yes
Hardware RTC	ePAD03 Yes, battery back-up ePAD04 -
Screen saver	-
Buzzer	-
Battery	ePAD03 3 V 270 mA Lithium, non rechargeable, user replaceable, model CR2430. Replace with same component or equivalent compatible with the operating temperature of the product. ePAD04 -
Ratings	
Power supply voltage	18 - 30 VDC
Current consumption	0.25 A at 24 VDC
Fuse	Automatic
Weight	1 Kg
Environmental Conditions	
Operating temperature	-0046 0 to 50 °C -00B6 0 to 60 °C -00B7 -20 to 60 °C
Storage temperature	-20 to +70 °C
Operating and storage humidity	5 – 85 % RH non-condensing
Protection class	IP65 (front panel)
Dimensions	
Faceplate LxH	149x109 mm (5.86"x4.29")
Cutout AxB	136x96 mm (5.35"x3.78")
Cutout depth	53 mm (2.08")

The product is designed for installation in industrial environments in compliance with the regulations:

Emitted interference	EN 61000-6-4, 2001
Noise immunity	EN 61000-6-2, 2001

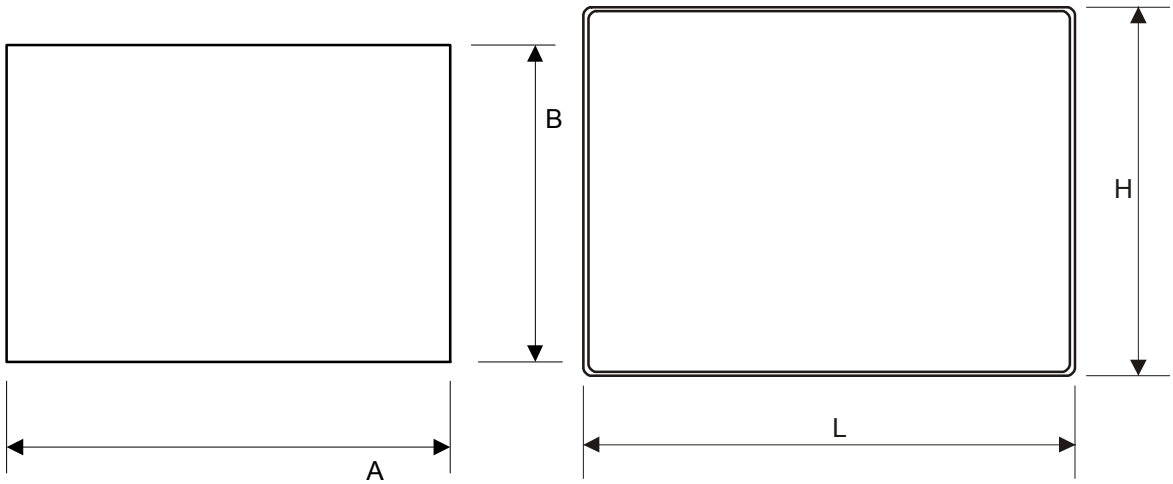

Figure 1 – Cutout and front view

Ordering Information

ePAD03-0046	Compact low-cost HMI with graphic display, recipes and Real Time Clock
ePAD03-00B6	Compact low-cost HMI with graphic display, recipes and Real Time Clock, extended operating temperature range
ePAD03-00B7	Compact low-cost HMI with graphic display, recipes and Real Time Clock, extended operating temperature range
ePAD04-0046	Compact low-cost HMI with graphic display
ePAD04-00B6	Compact low-cost HMI with graphic display, extended operating temperature range
ePAD04-00B7	Compact low-cost HMI with graphic display, extended operating temperature range
R-PRINT2298	Printable legends (5 A4 foils, 8 sets of legend per foil)