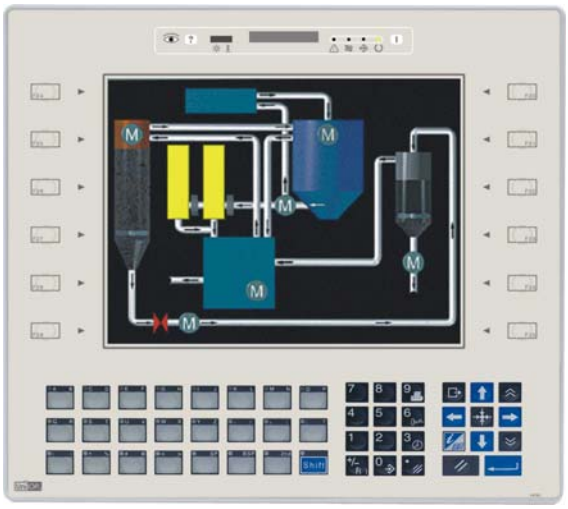
Tech-note

UniOP ePAD32B, ePAD33B and ePAD33BT

The ePAD32B, ePAD33B and ePAD33BT are state-of-the-art HMI devices with a VGA graphic display and a complete keypad. The aluminum bezel offers an appealing look in a rugged and convenient flat design.
The product is also available with a touchscreen option.



- 9.6” monochrome and 10.4” TFT color displays
- VGA (640x480 pixel) resolution
- 64K colors (ePAD33B and ePAD33BT)
- Resistive touchscreen (ePAD33BT)
- Connection to industrial bus systems and Ethernet (requires optional plug-in modules)
- Compatible with video input module (ePAD33B and ePAD33BT)
- 32 MB internal user memory

Highlights

The ePAD3xB HMI panels are part of the UniOP family of HMI products. All of the ePAD products support the rich common functionalities of the UniOP operator panels:

- Powerful and intuitive programming with the UniOP Designer 6 software
- 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.
- Dual-driver communication capability
- Vector graphic capabilities including the support of multiple layers and object transparency.
- Video input option (ePAD33B and ePAD33BT)
- Display dynamic data in numerical, text, bargraph and graphic image formats
- Data acquisition and trend presentation. Trend data can be transferred to a host computer using the Ethernet connection.
- Analog gauge objects
- Recipe data storage. Recipe data can be transferred to a 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 touchscreen operation
- Alarms and historical alarm list. Alarm and event information can be printed or transferred to a host computer using the Ethernet connection.
- Eight level password protection.
- Report printing to serial printer. Reports are freely configurable using Designer.
- Ethernet-based UniNet network to share data between UniOP HMIs and to serve data using UniNet OPC Server.

Technical Data

Display	
Type	ePAD32B monochrome ePAD33B TFT ePAD33BT TFT
Resolution	VGA, 640x480 pixel
Active display area	ePAD32B 196x147 mm (9.6” diagonal) ePAD33B 218x159 mm (10.4” diagonal) ePAD33BT 218x159 mm (10.4” diagonal)
Colors	ePAD32B 8 grey shades ePAD33B 64K ePAD33BT 64K
Backlight	ePAD32B CCFL ePAD33B CCFL, 50 Kh (note 1) ePAD33BT CCFL, 50 Kh (note 1)
Brightness	ePAD32B 100 cd/m^2 typ. ePAD33B 450 cd/m^2 typ. ePAD33BT 450 cd/m^2 typ.
Dimming	ePAD32B No ePAD33B Yes ePAD33BT Yes
Memory	
User memory	32 MB internal Flash
User memory expansion	Optional removable 32 MB SSFDC memory card
Front panel	
Touch screen	Analog resistive (ePAD33BT)
Function keys	35
System keys	24
User LED’s	24
System LED’s	4
Interfaces	
PC/Printer port	Yes
PLC port	RS-232, RS-485, RS-422, 20 mA Current Loop
Aux port (fieldbus and Ethernet)	Yes, with optional modules
DX port (video input)	ePAD32B No ePAD33B Yes ePAD33BT Yes
Serial programming speed	9600 – 38400 bps

Functionality	
Vector graphics	Yes
Dual driver capability	Yes
Video input	ePAD32B No ePAD33B Yes ePAD33BT Yes
Data acquisition and trends	Yes
Recipe memory	32 KB
UniNet network	Client/Server
Alarms	1024
Event list	1024
Password	Yes
Hardware RTC	Yes, battery backed
Screen saver	Yes
Buzzer	Yes, audible feedback for keyboard and touch screen
Battery	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.
Ratings	
Power supply voltage	24 V DC (18 to 30 V DC)
Current consumption	Max 0.7 A at 24 VDC
Fuse	Automatic
Weight	Approx 2.3 Kg
Environmental Conditions	
Operating temperature	0 to 45 °C
Storage temperature	-20 to +70 °C
Operating and storage humidity	5 – 85 % RH non-condensing
Protection class	IP65 (front panel)
Dimensions	
Faceplate LxH	311x276 mm (12.24x10.87“)
Cutout AxB	292x257 mm (11.50x10.12“)
Mounting depth (type 0050)	91 mm (3.58”)
Max panel thickness	5 mm (0.2”)

Note 1: the lamp lifetime is the typical value for continuous operation at 25ºC.

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

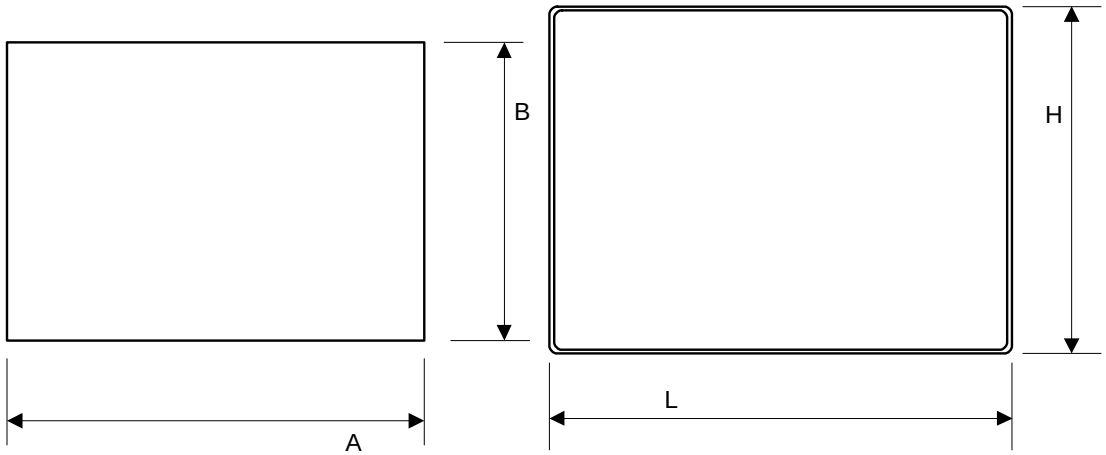


Figure 1 – Cutout and front view

Ordering Information

ePAD32B-0050	9.6” VGA monochrome panel with keypad
ePAD33B-0050	10.4” VGA TFT color panel with keypad
ePAD33BT-0050	10.4” VGA TFT color panel with keypad and touchscreen

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