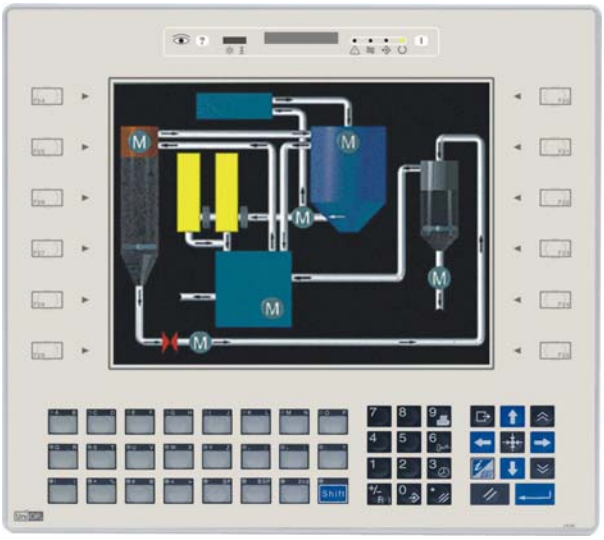
UniOP ePAD33 and ePAD33T

The ePAD33 and ePAD33T are state-of-the-art HMI devices with a 10.4” 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.

Highlights

- **VGA (640x480 pixels) resolution**
- **Available also with touchscreen option**
- **Connection to industrial bus systems and Ethernet (requires optional plug-in modules)**
- **Compatible with HMIcontrol and local I/O subsystems**
- **Large memory size (8 MB Flash) with removable media**
- **IP65 front panel protection**



The ePAD HMI panel features a fully equipped keypad with plenty of function keys. All of the ePAD products support the rich common functionality of the UniOP operator panels:

- Powerful and intuitive programming with the UniOP Designer software
- Support of more than 130 communication drivers for industrial devices
- Optional modules for fieldbus systems (Profibus DP, DeviceNet, Interbus, CANopen) and Ethernet
- Dual-driver communication capability
- Vector graphic capabilities
- Display data in numerical, text and bargraph format
- Dynamic graphic objects
- Data acquisition and trend presentation
- Analog gauges
- Recipe data storage
- Multilanguage applications. Number of runtime languages limited only by memory.
- Keyboard macro editor
- Alarms and historical alarm list
- Eight level password protection
- Report printing to serial printer

Technical Data

The product is available in two versions that differ only for the presence of the touchscreen.

	Display	Colors	Backlight	Lifetime
ePAD33, ePAD33T	TFT color LCD	256	CCFL	50000 h typ.

Display	
Graphic resolution	640x480 pixels
Brightness	450 cd/m^2
Active display area	218x159 mm
Rows/columns	30x80
Character height	-
Scalable fonts	Yes
User definable characters	256
Contrast regulation	-
Memory	
User memory	8 MB SSFDC memory card
User memory expansion	Max 16 MB SSFDC memory card
Front panel	
Function keys	35
System keys	24
Touch screen	Resistive for ePAD33T (guaranteed 3 M operations)
User LED's	24
System LED's	4
Connections	
PC/Printer port	Yes
PLC port	RS-232, RS-485, RS-422, 20 mA CL
Aux port (fieldbus and Ethernet connection)	Yes, with optional modules
External keyboard port	No
Programming speed	9600 - 38400 bps
Functionality	
Number of variables per page	Unlimited
Recipe memory	32 KB
Data acquisition and trends	Yes
UniNet network	Client/Server
Alarms	1024
Event list	1024
Alarm info page	Yes
Password	Yes
Battery	Yes
Hardware RTC	Yes, battery backed
Screen saver	Yes
Buzzer	Yes
Power supply voltage	18 - 30 VDC
Max power consumption	~ 700 mA at 24 VDC

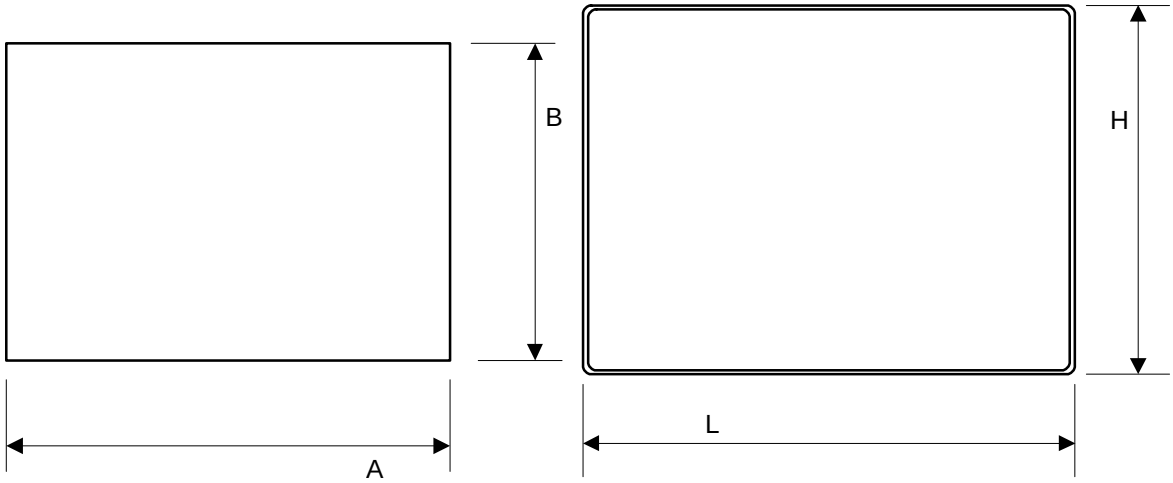
Fuse	Automatic
Weight	~ 2.5 Kg
Operating temperature	0 to 45 °C
Storage temperature	-20 to +70 °C
Operating and storage humidity	5 - 85 % RH non-condensing
Protection class	IP65 (front panel)

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

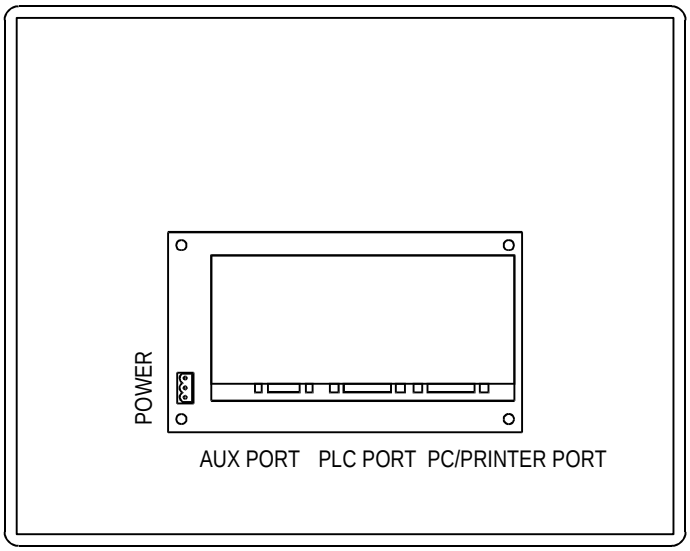
Emitted interference	EN 61000-6-4, 2001
Noise immunity	EN 61000-6-2, 2001

Front Dimensions and Cutout

Faceplate LxH	311x276 mm	12.24x10.87“
Cutout AxB	292x257 mm	11.50x10.12“
Cutout depth (version -0050)	91 mm	3.58”
Max panel thickness	5 mm	0.2”

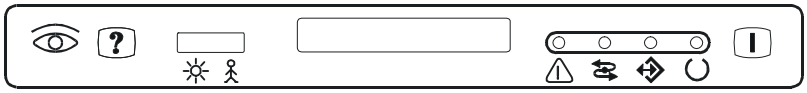


Connections



Indicators and keypad

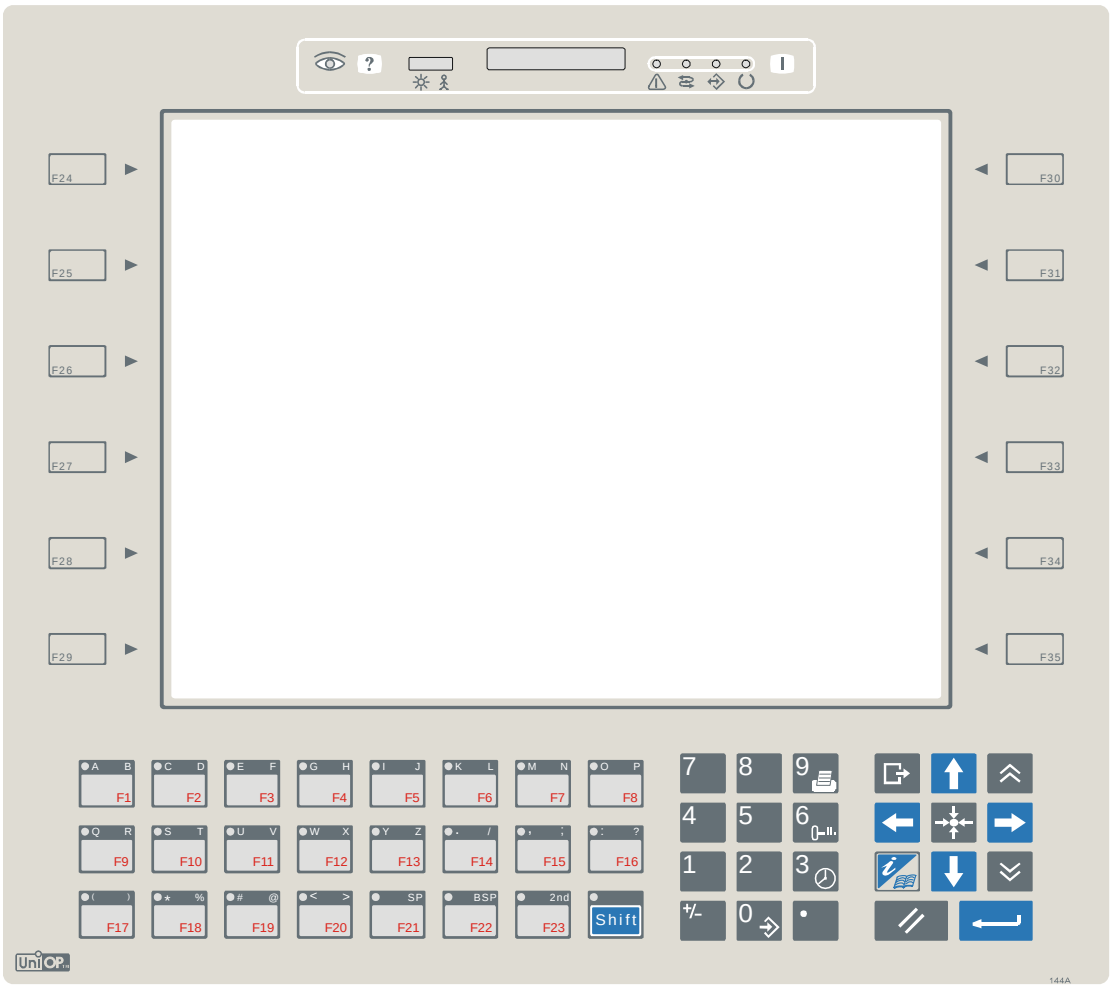
There are several dedicated LED indicators on the front panel of the unit. Functions are described in the table below.



Elements not listed in the table are reserved for future use.

LED	Color	Status	Meaning
	red	OFF	No hardware problem detected
		BLINK	Battery low
		ON	Hardware fault
	green	OFF	No key pressed and no touch cell active
		ON	Key pressed or touch cell active (visual feedback)
	green	OFF	Hardware fault
		ON	Unit in operation
	green	BLINK	Communication error
		ON	Communication OK
	red	OFF	No alarms
		BLINK	Alarm requires acknowledgment
		ON	Alarm active
	green		May be user controlled as LED number 65 using the Macro Editor. Turns ON when recipe/event backup is being performed.

The layout of the front panel is shown in the figure below. Please note that the labels F1 to F23 are not present in the real product.



The RDA mapping of LED indicators is shown in the table below.

RDA Bit	LED on Key
L1	F1
L2	F2
L3	F3
L4	F4
L5	F5
L6	F6
L7	F7
L8	F8
L9	F9
L10	F10
L11	F11
L12	F12
L13	F13
L14	F14
L15	F15
L16	F16

RDA Bit	LED on Key
L17	F17
L18	F18
L19	F19
L20	F20
L21	F21
L22	F22
L23	F23
L24	
L25	
L26	
L27	
L28	
L29	
L30	
L31	
L32	

The RDA mapping of all keys is standard. Note that not all keys are mapped to an RDA bit.

The service area at the top of the product includes also two buttons.

Button	Description
?	User programmable with the Keyboard Macro Editor. Not available in RDA. Designer 5.08 SP7 or higher is required.
I	Reserved for future use

Function keys from F1 to F23 have a slide-in legend. Legend strips are available as accessories in laser printable format.

Ordering Information

ePAD33-0050	10.4” TFT color display
ePAD33T-0050	10.4” TFT color display and resistive touchscreen
R-PRINT2852	Printable legends (5 A4 foils, 5 sets of legends per foil)