Tech-note

eTOP Windows CE Workstations

The eTOP industrial workstations for Windows CE are state-of-the-art HMI devices designed to meet the most rugged embedded application needs. Diskless and fanless operation make the product ideal for harsh environment. They provide a powerful and convenient platform to advantage from the capabilities of the Microsoft Windows CE operating system.
The eTOP workstations are available with touchscreen interface and come in a variety of display technologies and sizes, from 5.6” monochrome to 15” color TFT.

- Windows CE .NET 4.2
- Diskless and fanless operation
- Display sizes from 5.6” to 15”
- Resolution from 1/4 VGA to XVGA
- 64K colors (TFT displays only)
- Resistive touchscreen
- Ethernet 10/100 port
- USB port
- IP65 front panel protection

Highlights

The eTOP workstations for Windows CE are members of the UniOP family of operator interface products. They maintain the same mechanical look and feel of successful UniOP products while adding the connection capabilities and the powerful graphical user interface of the Windows CE operating system.
Microsoft® Windows® CE is a robust, compact, highly efficient, scalable operating system (OS) that is designed for a variety of embedded systems and products. Its multithreaded, multitasking, fully preemptive OS environment is designed specifically for hardware with limited resources.
Windows CE .NET, the successor to Windows CE 3.0, combines an advanced real-time embedded operating system with the most powerful tools for rapidly creating the next generation of smart, connected, and small-footprint devices.
The eTOP workstations are the ideal platform for running a web browser and turning the product into a perfect client station for use in industrial, marine and building applications.

- Windows CE .NET version 4.2
- OEM builds available on demand
- Built-in 10/100 Mb Ethernet port. Secondary Ethernet port optionally available.
- USB host port for connecting external keyboard, mouse or memory sticks
- JVM optionally available
- Video input option
- Local I/O expansion available optionally on some models

Technical Data

Display	Type	Resolution	Area (Diagonal)	Colors	Brightness	Dimming	Backlight (note 1)
eTOP105C	Monochrome	320x240	121x91 mm (5.6”)	8 grey	25 cd/m^2 typ	No	LED, 50000 h
eTOP110C	TFT	320x240	121x91 mm (5.6”)	64K	330 cd/m^2 typ.	Yes	CCFL, 50000 h
eTOP111C	STN	320x240	121x91 mm (5.6”)	256	330 cd/m^2 typ.	No	CCFL, 75000 h
eTOP119C	TFT	320x240	121x91 mm (5.6”)	64K	500 cd/m^2 typ.	Yes	CCFL, 25000 h
eTOP120C	TFT	640x480	154x116 mm (7.5”)	64K	330 cd/m^2 typ.	Yes	CCFL, 50000 h
eTOP133C	TFT	640x480	218x159 mm (10.4”)	64K	450 cd/m^2 typ.	Yes	CCFL, 50000 h
eTOP139C	ATFT	640x480	218x159 mm (10.4”)	64K	350 cd/m^2 typ.	Yes	CCFL, 50000 h
eTOP140C	TFT	800x600	246x184 mm (12.1”)	64K	370 cd/m^2 typ.	Yes	CCFL, 50000 h
eTOP150C	TFT	1024x768	304x228 mm (15”)	64K	250 cd/m^2 typ.	Yes	CCFL, 50000 h

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

Processing Unit	
CPU	NEC 4131 200 MHz
Flash Memory	64 MB
RAM Memory	64 MB
User Memory Expansion	Optional 64 MB SSFDC memory card
Operating System	Windows CE .NET 4.2
Front panel	
Touch screen	Analog resistive
Interfaces	
Ethernet port	10/100 Base-T, RJ45
USB port	Host
Serial Port 1	RS-232
Serial Port 2	RS-232, RS-485, RS-422, 20 mA Current Loop
Aux port (fieldbus and secondary Ethernet)	Yes, with optional modules
DX port (video input)	eTOP105C No eTOP110C Yes eTOP111C No eTOP119C Yes eTOP120C Yes eTOP133C Yes eTOP139C Yes eTOP140C Yes eTOP150C Yes

Functionality	
Hardware RTC	Yes, battery backed
Screen saver	Yes
Buzzer	Yes, audible feedback for 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	18 - 30 VDC
Current consumption	See table
Fuse	Automatic
Weight	See table
Environmental Conditions	
Operating temperature	See table
Storage temperature	-20 to +70 °C
Operating and storage humidity	5 – 85 % RH non-condensing
Protection class	IP65 (front panel)

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

	Current Consumption	Weight	Operating temperature	Faceplate LxH	Cutout AxB	Cutout depth	Type
eTOP105C	0.6 A	1.4 Kg	0 to 50 °C	187x147 mm	176x136 mm	67mm	-0045
eTOP110C	0.6 A	1.4 Kg	0 to 45 °C	187x147 mm	176x136 mm	91mm	-0050
eTOP111C	0.6 A	1.4 Kg	0 to 45 °C	187x147 mm	176x136 mm	91mm	-0050
eTOP119C	0.6 A	1.4 Kg	-10 to 55 °C	187x147 mm	176x136 mm	91mm	-0050
eTOP120C	0.7 A	1.6 Kg	0 to 45 °C	232x187 mm	221x176 mm	74 mm	-0045
eTOP133C	0.7 A	2.25 Kg	0 to 45 °C	287x232 mm	276x221 mm	91mm	-0050
eTOP139C	0.7 A	3.4 Kg	-10 to 55 °C	287x232 mm	276x221 mm	102mm	-0050
eTOP140C	0.8 A	2.85 Kg	0 to 45 °C	337x267 mm	326x256 mm	91mm	-0050
eTOP150C	1.2 A	3.85 Kg	0 to 45 °C	392x307 mm	381x296 mm	100mm	-0050

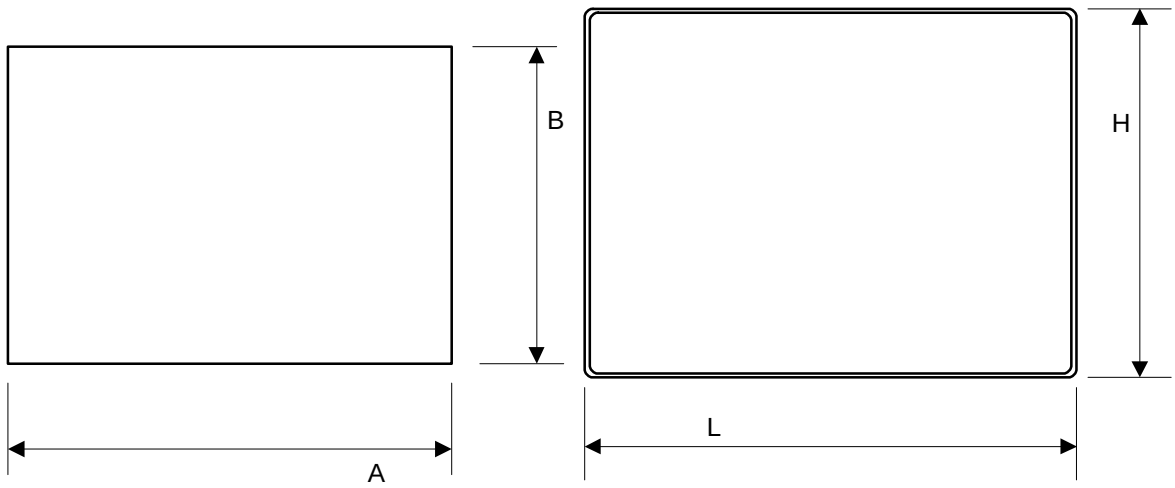

Figure 1 – Cutout and front view

Ordering Information

eTOP105C-0045	Windows CE workstation, 5.6” ¼ VGA monochrome, touchscreen
eTOP110C-0050	Windows CE workstation, 5.6” ¼ VGA TFT 64K colors, touchscreen
eTOP111C-0050	Windows CE workstation, 5.6” ¼ VGA STN 256 colors, touchscreen
eTOP119C-0050	Windows CE workstation, 5.6” ¼ VGA high performance TFT 64K colors, touchscreen
eTOP120C-0045	Windows CE workstation, 7.5” VGA TFT 64K colors, touchscreen
eTOP133C-0050	Windows CE workstation, 10.4” VGA TFT 64K colors, touchscreen
eTOP139C-0050	Windows CE workstation, 10.4” VGA high performance TFT 64K colors, NFI touchscreen
eTOP140C-0050	Windows CE workstation, 12.1” SVGA TFT 64K colors, touchscreen
eTOP150C-0050	Windows CE workstation, 15” XVGA TFT 64K colors, touchscreen

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