

Tackle Your Industrial PC Needs with A Proven Brand.



DS ePC-Series, Rev F

For more information or to request a quote, visit us online at www.nematron.com

ePC-Series

Embedded High Performance Ultra-Thin 12.1" to 19" TFT Industrial PCs



**Now Standard
with Solid State
Drive & 2 GB DRAM**

With the Nematron ePC-Series, "embedded" doesn't have to mean low performance any longer. This series offers ultra-thin industrial PCs with Intel® Duo Core™ Technology to power the most demanding operator interface and SCADA applications. Now available with your choice of 12.1", 15", 17", or 19" LCD displays, the ePC-Series is setting a new benchmark for "Industrial PCs".

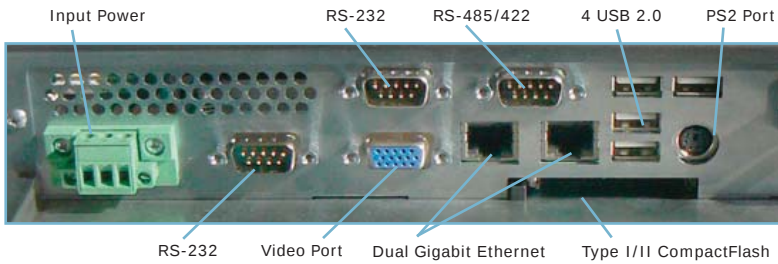
Standard Features

- 12.1" SVGA to 19" SXGA Color TFT LCD Display
- 5-wire Analog Resistive Touchscreen
 - Optional clear Lexan window
- Ultra-Thin panel mounting depth, less than 3.2"
- High Performance / Low Power Processor options* to choose from:
 - Intel® Celeron® M 440 (1.86 GHz, 1 M cache, 533 MHz bus)
 - Intel® Core Duo™ T2500 (2.0 GHz, 2 M cache, 667 MHz bus)
- 2 GB DRAM
- Intel 40 GB Easily Removable SATA Solid State Drive
 - Optional larger sizes and rotating HD
- Extensive I/O Connectivity
 - Dual Gigabit (10/100/1000) Ethernet ports
 - 4 USB 2.0 ports
 - 1 RS-485/422 serial port (jumper selectable)
 - 2 RS-232 serial ports
 - PS/2 port
 - Additional video port (supports dual video)
 - Rear accessible CompactFlash™ Type I/II socket
- Integral 100-240 VAC power supply
 - 24 VDC optional
- Powder Coated Aluminum Front Panel (optional Stainless Steel)
- NEMA 4/4x12 front panel
- 2-year Warranty
- UL and cUL Ordinary Locations Listed
- UL and cUL Hazardous Locations Listed
 - Class I Division 2, Groups A, B, C, & D; Class II Division 2, Groups F & G; Class III when mounted in a NEMA enclosure
- FCC & European CE compliant
- RoHS compliant
- Windows® XP Professional (Windows 7 Professional optional)

* Fanless Versions now available. See ePC Fanless Series datasheet.

Features & Benefits

Extensive I/O Connectivity

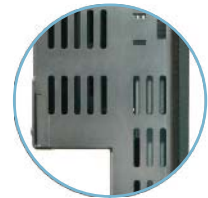


Easily Removable SATA Solid State Drive

- Larger Sizes or Conventional Hard Drive optional



Ultra-thin, extremely compact design



Optional 5-wire Analog Resistive Touchscreen

UL, cUL 508, Class I, Div 2, CE, & RoHS Approvals

Made with Pride in the USA

Integral 100-240 VAC or 24 VDC Power Supply



Powder Coated Aluminum or Stainless Steel Front Panels



USB, Ethernet, & PS/2 Hold Down



CompactFlash to replace CD-ROM and floppy drives



VESA Mounting

- ePC1200/1500/1700: 75mm
- ePC1900: 100mm



NEMA Panel Mounting via Clips



High Performance / Low Power Processor Options*

- Intel® Celeron® M 440 (1.86 GHz, 1 M cache, 533 MHz bus)
- Intel® Core Duo™ T2500 (2.0 GHz, 2 M cache, 667 MHz bus)

* Fanless Versions now available. See ePC Fanless Series datasheet.



Meet all RoHS Hazardous Safety Standards.



Standard 2-year warranty

- Covers parts and service



Technical Specifications

SYSTEM SPECS

Chipset	Intel 945GME + ICH7M	
Video	Integrated in system chipset	
Video RAM	8 MB - 128 MB (system RAM)	
Type & Processor	Intel Celeron M 440	Intel Core Duo T2500
Core Speed	1.86 GHz	2.0 GHz
Front Side Bus	533 MHz	667 MHz
L2 Cache	1MB	2MB
Ethernet Controller	Broadcom	

DISPLAY

	ePC1200	ePC1500	ePC1700	ePC1900
Display Diagonal	12.1" (307.34mm)	15.0" (381.0mm)	17.0" (431.8mm)	19.0" (482.6mm)
Display Sizes (Active Area H x V)	9.69" x 7.26" (246.0mm x 184.5mm)	11.97" x 8.98" (304.0mm x 228.1mm)	13.30" x 10.64" (337.9mm x 270.3mm)	14.82" x 11.85" (376.3mm x 301.1mm)
Native Resolution	SVGA, 800 x 600	XGA, 1024 x 768	SXGA, 1280 x 1024	SXGA, 1280 x 1024
Displayable Colors	262K	16M	16M	16M
Brightness, Typical	400 Nit	300 Nit	380 Nit	300 Nit
Contrast Ratio, Typical	500:1	800:1	1000:1	2000:1
Horizon/Vertical View Angle, CR>5, Typical	130°/110°	150°/145°	170°/170°	178°/178°
Backlight Life, Typical	50,000 hrs	50,000 hrs	50,000 hrs	50,000 hrs

TOUCH SCREEN (all models)

Touch Screen Technology	5-wire Analog Resistive
Resolution	4096 x 4096
Positional Accuracy (Maximum Error)	0.18" (0.19" ePC1900) 4.57mm (4.83mm ePC1900)
Positional Accuracy (Standard Deviation of Error)	< 0.08" (< 2.0 mm)
Expected Life	>35,000,000 Activations

ELECTRICAL

AC Input Voltage	100-240 VAC, 50/60 Hz
AC Input Current	1.0 A Maximum
DC Input Voltage (optional)	18-36 VDC
DC Input Current (optional)	4.5 A Max
Input Power	ePC1200/1500 - 50 W Typical* ePC1700 - 60 W Typical* ePC1900 - 70 W Typical*

* Typical Power is measured without any additional I/O or expansion options. Any additional I/O installed during application can increase this value.

ENVIRONMENTAL

Temp.	Operating 0°C to 50°C	Non-operating -20°C to 60°C
Humidity	20% to 80% RH, noncondensing	
Shock ¹	15g peak acceleration, 11msec	30g peak acceleration, 11msec
Vibration ¹	.006" peak to peak displacement (5-2000 Hz)	.015" peak to peak displacement 2.5g maximum acceleration
Altitude ²	Sea level to 10,000 feet	Sea level to 40,000 feet

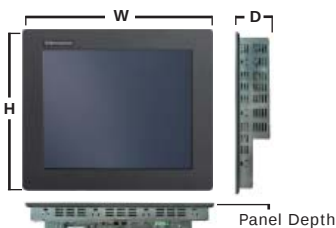
¹ Shock & Vibration specifications established with Solid State drives and no rotating media.

² Altitude specification is established by using all internal component specifications.

PHYSICAL

	ePC1200	ePC1500	ePC1700	ePC1900
Overall Dimensions (H x W x D)	10.475" x 12.9" x 3.42" (266.1mm x 327.7mm x 86.75mm)	12.80" x 15.80" x 2.95" (325.1mm x 401.3mm x 74.9mm)	14.48" x 17.14" x 3.10" (367.8mm x 435.4mm x 78.7mm)	15.70" x 18.66" x 3.25" (398.8mm x 474.0mm x 82.6mm)
Panel Mounting Depth	3.165" (80.4mm)	2.70" (68.6mm)	2.85" (72.4mm)	3.00" (76.2mm)
Cutout Dimensions (H x W)	9.68" x 12.10" (245.9mm x 307.3mm)	12.00" x 15.00" (305.0mm x 381.0mm)	13.70" x 16.35" (348.0mm x 415.3mm)	14.90" x 17.75" (378.5mm x 450.9mm)
VESA Mount Pattern (M4 Threads)	75x75mm	75x75mm	75x75mm	100x100mm
Weight	10.5 lbs (4.76kg)	15.0 lbs (6.80kg)	19.0 lbs (8.63kg)	22.5 lbs (10.22kg)
Shipping Weight	14.0 lbs (6.35kg)	19.5 lbs (8.84kg)	23.5 lbs (10.67kg)	27.5 lbs (12.49kg)
Option Weight (SS)*	+2.5 lbs (1.13kg)*	+3.5 lbs (1.58kg)*	+3.75 lbs (1.70kg)*	+4.0 lbs (1.81kg)*

* Additional weight for Stainless Steel option.



Cutout Dimensions

ePC1200	ePC1500	ePC1700	ePC1900
12.10" (W) 307.3mm 9.68" (H) 245.9mm	15.00" (W) 381.0mm 12.00" (H) 305.0mm	16.35" (W) 415.3mm 13.70" (H) 348.0mm	17.75" (W) 450.9mm 14.90" (H) 378.5mm

Order Number Generation

Base unit configuration: ePCx00T-CM440-2GB-40SS-XP, where **x** = 12, 15, 17, or 19 (for display size), includes a touchscreen, Celeron M 440, 2 GB DRAM, 40 GB SATA Solid State Drive, and Windows XP Pro.

ePC

Display Size:

1200	12.1" SVGA LCD
1500	15.0" XGA LCD
1700	17.0" SXGA LCD
1900	19.0" SXGA LCD

Input Options:

T	Touchscreen
blank	None

Processor:

CM440	Celeron M 440
T2500	Core Duo T2500

DRAM Options:

-2GB	2 GB DRAM
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Hard Drive:

-40SS	40 GB SATA Solid State Drive ¹
-80SS	80 GB SATA Solid State Drive ¹
-160SS	160 GB SATA Solid State Drive ¹
blank	250 GB (minimum) SATA hard drive

Operating System:

-XP	Windows XP Professional
-W7	Windows 7 Professional (32-bit)
-NOS	No OS installed

Power Supply:

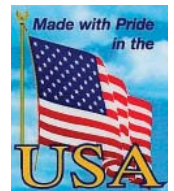
blank	120-240 VAC
-DC	24 Volt DC

Front Panel:

blank	Powder Coated Aluminum
-NL	Powder Coated Aluminum w/o Logo
-SS	Machined 304 Stainless Steel
-RM	Rackmount Powder Coated Aluminum (ePC1900 only) ²

¹ Solid State Drive options carry a 5-year (part only) warranty.

² Rackmount front panel is not NEMA 4/4x/12 and the unit is required to be installed on a rack in a Type 1 enclosure.



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