

# ePC-Lite Series

Embedded Low-Cost & Fanless TFT Flat Panel Industrial PCs



**ePC19T**  
SXGA



**NEW FANLESS  
QUAD CORE  
CELERON N2930  
PROCESSOR!**



**nPC10**  
Node



**ePC15T**  
XGA

## Overview

The ePC "Lite" Series is Nematron's economy line of industrial PCs, equipped with standard features to handle applications where a full offering of traditional features are not required. The "Lite" Series is offered at a significantly lower cost than the popular iPC-Series, while still providing the reliability, ruggedness and support that come with Nematron products. The ePC "Lite" Series comes standard with a Fanless Intel Quad Core Celeron N2930 fanless CPU and solid state drive storage, eliminating many of the reliability issues associated with industrial PCs due to rotating media or CPU cooling fans.

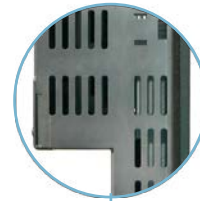
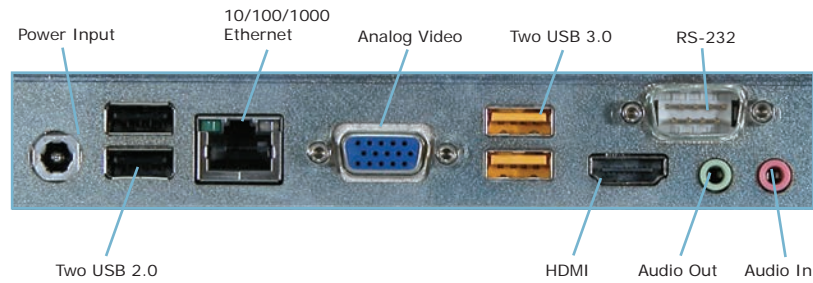


## Standard Features

- Choice of: 15.0" XGA & 19.0" SXGA Color TFT LED-backlit Displays
- Non-display Node PC available - nPC10
- High Performance/Very Low Power Fanless Processor
  - Intel® Quad Core Celeron N2930 (1.83 GHz (bursts to 2.16 GHz), 2 MB Cache, 4 Cores, 4 Threads)
- 2 GB DRAM (4 or 8 GB optional)
- Storage options include:
  - **ePC15 & ePC19:** 80 GB Solid State Drive (160 GB optional)
  - **nPC10:** Internal onboard 60 GB mSATA Solid State Drive (120 GB optional)
- 5-wire Analog Resistive Touchscreen
- I/O Connectivity
  - One 10/100/1000 Ethernet port
  - Two USB 2.0 ports
  - Two USB 3.0 Ports
  - One RS-232 serial port
  - Audio in/out
  - Additional Analog and HDMI ports (supports dual video modes with integrated LCD)
- NEMA 4/4x/12 powder coated aluminum front panel (optional no logo front panel)
- Optional NEMA1 powder coated rear enclosure (vented, not water or dust proof)
- Ultra-Thin panel mounting depth of 2.4" on ePC15T (2.7" - ePC19T)
- External 100-240 VAC power supply included
  - Regulated 12 VDC, 3.75 A Max output (ePC15T); 3.85 A Max output (ePC19T); 1.9 A (nPC10) (can also be powered by other Listed ITE power supplies or Class 2 power sources)
- 0° to 50°C operational temperature rating
- UL and cUL Ordinary Locations Listed
- FCC & CE compliant
- Windows® 7 Professional 32-bit
  - Windows 7 Ultimate 64-bit optional
- 2-year Warranty

# Features & Benefits

## I/O Connectivity (nPC10 Node I/O shown below)



### Ultra-thin, extremely compact design

- 2.4" Mounting Depth (15")
- 2.7" Mounting Depth (19")



### 5-wire Analog Resistive Touchscreen

### Made with Pride in the USA

UL 508/cUL Ordinary Locations only, CE Approvals

Intel Fanless Quad Core Celeron N2930 CPU

### Power Input

- 12 VDC input supplied by Listed ITE power supply or Class 2 source



### Powder Coated Aluminum Front Panel

- No logo front panel option



### VESA Mounting

- ePC15T: 75mm
- ePC19T: 100mm



### NEMA Panel Mounting via Clips



### Optional NEMA 1 Powder Coated Rear Enclosure

- Vented, Not Water or Dust Proof
- Shown with optional mounting arm (sold separately)



### High Performance/Very Low Power Fanless Processor

- Intel® Quad Core Celeron N2930 (1.83 GHz (bursts up to 2.16 GHz), 2 MB Cache, 4 Cores, 4 Threads)



### External 100-240 VAC Power Supply

- ePC15T: Regulated 12 VDC, 3.75 A Max output
- ePC19T: Regulated 12 VDC, 3.85 A Max output
- nPC10: Regulated 12 VDC, 1.9 A Max output



(MTG-DIN-nPC10)

### nPC10 - DIN Rail Mountable to Rear of M-Series Monitor (DIN Rail kit sold separately)

- Mounting kit includes DIN Rail bracket that mounts to 75mm or 100mm VESA mounting pattern on rear of the units.
- Also allows nPC10 to be mounted to any DIN Rail.



### Standard 2-year warranty

- Covers parts and service



For Ordinary Locations Use Only

# Technical Specifications



Physical	ePC15T	ePC19T	nPC10
Overall Dimensions <i>H x W x D</i>	12.80" x 15.80" x 2.65" (325.1mm x 401.3mm x 67.3mm)	15.70" x 18.66" x 2.95" (398.8mm x 474.0mm x 75.0mm)	7.750" x 7.750" x 1.30" (196.8mm x 196.8mm x 33.02mm)
Overall Dimensions w/ Mounting Brackets	-	-	7.750" x 9.06" x 1.61" (196.8mm x 230.12mm x 40.89mm)
Panel Mounting Depth	2.4" (61.0mm)	2.7" (68.6mm)	-
Cutout Dimensions <i>H x W</i>	12.00" x 15.00" (305.0mm x 381.0mm)	14.90" x 17.75" (378.5mm x 450.9mm)	-
Weight	14.0 lbs (6.35kg)	22.5 lbs (10.21kg)	2.7 lbs (1.2 kg)
Shipping Weight	19.0 lbs (8.62kg)	27.5 lbs (12.47kg)	4.2 lbs (1.9 kg)
Display	ePC15T	ePC19T	nPC10
Display Diagonal	15.0" (381.0mm)	19.0" (482.6mm)	-
Display Size <i>Active Area H x V</i>	11.97" x 8.98" (304.0mm x 228.1mm)	14.82" x 11.85" (376.3mm x 301.1mm)	-
Native Resolution	XGA, 1024 x 768	SXGA, 1280 x 1024	-
Brightness / Contrast Ratio	400 nit / 600:1	300 nit / 2000:1	-
Horz/Vert Viewing Angle	140°/120°	178°/178°	-
Backlight Life / Typical	50,000 hrs	50,000 hrs	-
Electrical			
AC Power Supply	100-240 VAC, 47-63 Hz, 1.1 A Maximum	100-240 VAC, 47-63 Hz, 1.5 A Maximum	100-240 VAC, 47-63 Hz, 1.1 A Maximum
DC Input Voltage/Max Current	12 VDC, Regulated ± 5%, 3.75 A Maximum <sup>1</sup>	12 VDC, Regulated ± 5%, 3.85 A Maximum <sup>1</sup>	12 VDC, Regulated ± 5%, 1.9 A Maximum <sup>1</sup>
		<sup>1</sup> Output of included AC power supply. Can also be powered by other Listed ITE power supply or Class 2 Power sources.	
Typical* Power	ePC15T	ePC19T	nPC10
Input Power	30W	40W	20W
		* Typical power is measured per model/per processor with all possible I/O ports functioning.	

## COMMON SPECS

### Processor Options

Type & Processor	Intel Quad Core Celeron N2930 (fanless)
Core Speed	1.83 GHz (with bursts up to 2.16 GHz)
Cores / Threads	4 / 4
L2 Cache	2 MB
Chipset	Intel Bay Trail-M
Graphics Controller	Intel Gen7 Graphics DX 11, OGL3.2
Ethernet Controller	Realtek Gigabit 10/100/1000 (1 port)

### Memory & I/O

DRAM	2GB Single Module (204-pin DDR3 SO-DIMM, non-ECC, unbuffered, 1066 MHz); Optional 4GB or 8GB <sup>2</sup> max
Standard Storage	ePC15T/ePC19T: 80GB Solid State Drive <sup>3</sup> ; Optional 160GB Solid State Drive <sup>3</sup> ; nPC10: 60GB mSATA; Optional 120GB mSATA
Available I/O	(1) HDMI Port, (2) USB 2.0, (2) USB 3.0, (1) RS-232, (1) Analog Video Port (supports dual video), (1) Ethernet 10/100/1000 Port, (2) Audio In/Out Ports
	<sup>2</sup> 8GB DRAM only available when configured with 64-bit Windows 7 Ultimate operating system. <sup>3</sup> Internal Solid State Drives installed in the ePC-Lite Series only fall under the system warranty and do not carry any extra part warranty.

### Touchscreen

Technology	5-wire Analog Resistive (Not applicable on the nPC10 model)
------------	---

### Operating System

Standard OS	Windows 7 Professional (32-bit); optional Windows 7 Ultimate (64-bit)
-------------	---

### Environmental

	Operating	Non-operating
Temperature <sup>4</sup> / Humidity	0°C to 50°C / 20% to 80% RH, noncondensing	-20°C to 60°C / 20% to 80% RH, noncondensing
Shock <sup>5</sup>	15g peak acceleration, 11msec	30g peak acceleration, 11msec
Vibration (5-2000 Hz) <sup>5</sup>	.006" peak to peak displacement, 1.0g maximum acceleration	.015" peak to peak displacement, 2.5g maximum acceleration
Altitude <sup>6</sup>	Sea level to 10,000 feet	Sea level to 40,000 feet
	<sup>4</sup> Temperature specifications are for air temp surrounding the unit (i.e. inside any enclosure being utilized). <sup>5</sup> Shock & Vibration specifications established with Solid State drives and no rotating media. <sup>6</sup> Altitude specification is established by using all internal component specifications.	

### Agency Approvals

Front Panel NEMA Rating	NEMA 4/4X/12, IP65
Enclosure Rating <sup>7</sup>	NEMA 1 (vented, not dust or water proof, for stand-alone VESA mounting)
FCC	47 CFR, Part 15, Class A
EU CE Marking Compliance	CE, EN 55022: Class A, EN 61000-3-3, EN 61000-6-2, IEC 60950-1
Safety Agency Approvals <sup>*</sup>	UL508 Listed, cUL Listed CSA C22.2, #142
	<sup>7</sup> NEMA 1 only, not recommended for environments with high levels of moisture and/or particulate matter.

### Options

Front Panel Options	Powder-Coated Aluminum Front Panel; with No Logo
---------------------	--

## Order Number Generation

**Base unit configuration: ePC15T-N2930-2GB-80SS-W7**, includes a 15" XGA TFT display with touch-screen, fanless Intel Quad Core Celeron N2930, 2 GB DRAM, 80 GB internal solid state drive, Windows 7 Professional (32-bit), and External AC Power Supply.

### ePC -N2930



ePC15T



ePC19T

<b>Display Size:</b>	_____	
15T	15.0" XGA LCD	
19T	19.0" SXGA LCD	
<b>DRAM:</b>	_____	
-2GB	2 GB DRAM	
-4GB	4 GB DRAM	
-8GB	8 GB DRAM <sup>1</sup>	
<b>Internal Storage<sup>2</sup>:</b>	_____	
-80SS	80 GB internal Solid State Drive	
-160SS	160 GB internal Solid State Drive	
<b>Operating System:</b>	_____	
-W7	Windows 7 Professional (32-bit)	
-W7U	Windows 7 Ultimate (64-bit)	
<b>Front Panel:</b>	_____	
blank	Powder Coated Aluminum	
-NL	Powder Coated Aluminum w/o Logo	
<b>Enclosure:<sup>3</sup></b>	_____	
blank	Panel Mount front panel w/o rear enclosure	
-EN	Vented rear enclosure for stand-alone VESA mounting	

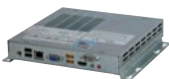
<sup>1</sup> 8 GB DRAM only available when configured with 64-bit Windows 7 Ultimate (-W7U).

<sup>2</sup> Internal Solid State Drives installed in the ePC-Lite Series only fall under the system warranty and do not carry any extra "part" warranty.

<sup>3</sup> NEMA 1 only, not recommended for environments with high levels of moisture and/or particulate matter.

**Base unit configuration: nPC10-N2930-2GB-60mS-W7**, includes Intel Quad Core Celeron N2930, 2 GB DRAM, 60 GB On-board mSATA Storage, Windows 7 Professional (32-bit), and External AC Power Supply.

### nPC10-N2930



nPC10

<b>Storage:</b>	_____	
-2GB	2 GB DRAM	
-4GB	4 GB DRAM	
-8GB	8 GB DRAM <sup>1</sup>	
<b>Storage:</b>	_____	
-60mS	60 GB On-board mSATA Storage	
-120mS	120 GB On-board mSATA Storage	
<b>Operating System:</b>	_____	
-W7	Windows 7 Professional (32-bit)	
-W7U	Windows 7 Ultimate (64-bit)	

<sup>1</sup> 8 GB DRAM only available when configured with 64-bit Windows 7 Ultimate (-W7U).

### Contact Information

**Headquarters** - Nematron, a Division of Comark  
 5840 Interface Drive, Suite 100  
 Ann Arbor, MI 48103 USA  
 Tel: 1.734.214.2000  
 Fax: 1.734.994.8074  
 Email: info@nematron.com

