

## Nematron ePC19T Lite Series Industrial PC

19.0" Low-Cost, Fanless Flat Panel Mount Industrial PCs

Intel® Fanless Processing

LED Backlit Display

Analog Resistive Touchscreen

Solid State Drive Storage

UL/cUL Ordinary Locations

NEMA 4/4X/12, IP65

Windows 7 or 10 OS



**Nematron**  
by COMARK

DS ePC19T Lite, Rev B



Made in USA

### 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 Configuration

- |   |   |  |
|---|---|--|
| <ul style="list-style-type: none"> <li>▪ 19.0" SXGA Color TFT LED-backlit Display</li> <li>▪ High Performance/Very Low Power Fanless Processor             <ul style="list-style-type: none"> <li>- Intel® Quad Core Celeron N2930 (1.83 GHz (bursts to 2.16 GHz), 2 MB Cache, 4 Cores, 4 Threads)</li> </ul> </li> <li>▪ 4 GB DRAM (8 GB optional)</li> <li>▪ 240 GB Solid State Drive (480 GB or 1TB SATA Hybrid Hard Drive optional)</li> <li>▪ 5-wire Analog Resistive Touchscreen</li> <li>▪ I/O Connectivity             <ul style="list-style-type: none"> <li>- One 10/100/1000 Ethernet port</li> <li>- Two USB 2.0 ports</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>- Two USB 3.0 Ports</li> <li>- One RS-232 serial port</li> <li>- Audio in/out</li> <li>- Additional Analog and HDMI ports (supports dual video modes with integrated LCD)</li> <li>▪ NEMA 4/4x/12 powder coated aluminum front panel (optional no logo front panel)</li> <li>▪ Optional NEMA1 powder coated rear enclosure (vented, not water or dust proof)</li> <li>▪ Ultra-Thin panel mounting depth of 2.7"</li> <li>▪ External 100-240 VAC power</li> </ul> | <p>supply included</p> <ul style="list-style-type: none"> <li>- Regulated 12 VDC, 3.75 A Max output (can also be powered by other Listed ITE power supplies or Class 2 power sources)</li> <li>▪ 0° to 50°C operational temperature rating</li> <li>▪ UL and cUL Ordinary Locations Listed</li> <li>▪ FCC &amp; CE compliant</li> <li>▪ Windows® 7 Professional 32-bit             <ul style="list-style-type: none"> <li>- Windows 7 Ultimate 64-bit or Windows 10 Enterprise IoT 32-bit or 64-bit optional</li> </ul> </li> <li>▪ 2-year Warranty</li> </ul> |
|---|---|--|

# Technical Specifications



## Physical

Overall Dimensions	15.70" x 18.66" x 2.95" (398.8mm x 474.0mm x 75.0mm)
Panel Mounting Depth	2.7" (68.6mm)
Cutout Dimensions	14.90" x 17.75" (378.5mm x 450.9mm)
Weight	22.5 lbs (10.21kg)
Shipping Weight	27.5 lbs (12.47kg)

## Display

Display Diagonal	19.0" (482.6mm)
Display Size H x V	14.82" x 11.85" (376.3mm x 301.1mm)
Native Resolution	SXGA, 1280 x 1024
Brightness	300 nit
Contrast Ratio	2000:1
Horz/Vert Viewing Angle	178°/178°
Backlight Life / Typical	50,000 hrs
Touchscreen	5-wire Analog Resistive

## Processor

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

## Storage & Peripherals

Operating System	Windows 7 Professional (32-bit); optional Windows 7 Ultimate (64-bit), Windows 10 Enterprise IoT (32-bit or 64-bit)
DRAM	4GB Single Module (204-pin DDR3 SO-DIMM, non-ECC, unbuffered, 1066 MHz); Optional 8GB <sup>1</sup> max
Standard Storage	240GB Solid State Drive <sup>2</sup> ; Optional 480GB Solid State Drive <sup>2</sup> or 1TB SATA Hybrid Hard Drive <sup>3</sup>
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>1</sup> 8GB DRAM only available when configured with Windows 7 Ultimate (-W7U) 64-bit or Windows 10 Enterprise IoT (-W1064) 64-bit operating system.  
<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> Hybrid hard drives have a solid state adaptive memory cache to significantly increase read/write performance. These are rotating hard drives and do not carry any extra part warranty.

## Power

Input Power	40W
AC Power Supply	100-240 VAC, 47-63 Hz, 1.5 A Maximum
DC Input Voltage	12 VDC, Regulated $\pm$ 5%, 3.85 A Maximum <sup>4</sup>

<sup>4</sup> Output of included AC power supply. Can also be powered by other Listed ITE power supply or Class 2 Power sources.

# Technical Specifications

## Environmental

	Operating	Non-operating
Temperature <sup>5</sup>	0°C to 50°C	-20°C to 60°C
Humidity	20% to 80% RH, noncondensing	20% to 80% RH, noncondensing
Shock <sup>6</sup>	15g peak acceleration, 11msec	30g peak acceleration, 11msec
Vibration (5-2000 Hz) <sup>6</sup>	.006" peak to peak displacement, 1.0g maximum acceleration	.015" peak to peak displacement, 2.5g maximum acceleration
Altitude <sup>7</sup>	Sea level to 10,000 feet	Sea level to 40,000 feet

<sup>5</sup> Temperature specifications are for air temp surrounding the unit (i.e. inside any enclosure being utilized). Meets US Federal Requirements specified in 46 CFR 111.01-15 (d) for offshore electrical systems.  
<sup>6</sup> Shock & Vibration specifications established with Solid State drives and no rotating media.  
<sup>7</sup> Altitude specification is established by using all internal component specifications.

## Compliance

NEMA Rating	NEMA 4/4X/12, IP65
Enclosure Rating <sup>8</sup>	NEMA 1 (vented, not dust or water proof, for stand-alone VESA mounting)
FCC	47 CFR, Part 15, Class A
EU CE Marking	CE, EN 55022: Class A, EN 61000-3-3, EN 61000-6-2, IEC 60950-1
Agency Approvals *	UL508 Listed, cUL Listed CSA C22.2, #142

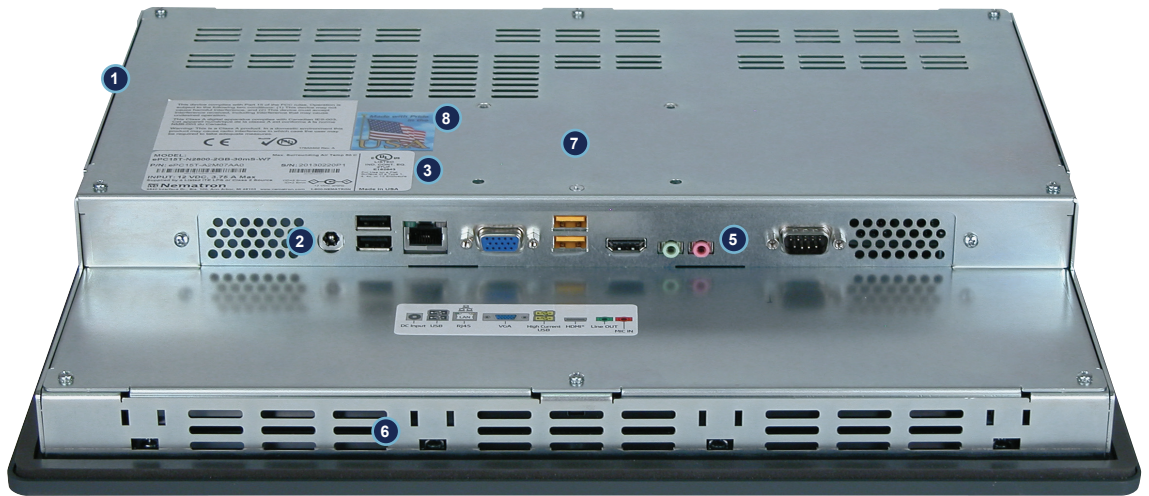
<sup>8</sup> NEMA 1 only, not recommended for environments with high levels of moisture and/or particulate matter.

## Front Panel

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

- 5-wire Analog Resistive Touchscreen
- Power Input: 12VDC input supplied by Listed ITE power supply or Class 2 source
- UL 508/cUL Ordinary Locations only, CE Approval Label
- Optional NEMA 1 Powder Coated Rear Enclosure
- I/O Connectivity
- Panel Mounting via Clips
- VESA Mounting ePC19T - 100mm
- Made with Pride in the USA



- Optional NEMA 1 Powder Coated Rear Enclosure**
- Vented, Not Water or Dust Proof
  - Shown with optional mounting arm (sold separately)



Standard 2-year warranty  
- Covers parts and service



# Order Number Generation

**Base unit configuration: ePC19T-N2930-4GB-240SS-W7**, includes a 15" XGA TFT display with touchscreen, fanless Intel Quad Core Celeron N2930, 4 GB DRAM, 240 GB internal solid state drive, Windows 7 Professional (32-bit), and External AC Power Supply.



## ePC19T-N2930

<b>Display Size:</b>	_____
19T	19.0" SXGA LCD
<b>DRAM:</b>	_____
-4GB	4 GB DRAM
-8GB	8 GB DRAM <sup>1</sup>
<b>Internal Storage:</b>	_____
-240SS	240 GB internal Solid State Drive <sup>2</sup>
-480SS	480 GB internal Solid State Drive <sup>2</sup>
-HD	1TB (minimum) SATA Hybrid Hard Drive <sup>3</sup>
<b>Operating System:</b>	_____
-W7	Windows 7 Professional (32-bit)
-W7U	Windows 7 Ultimate (64-bit)
-W1032	Windows 10 Enterprise IoT (32-bit)
-W1064	Windows 10 Enterprise IoT (64-bit)
<b>Front Panel:</b>	_____
blank	Powder Coated Aluminum
-NL	Powder Coated Aluminum w/o Logo
<b>Enclosure:</b> <sup>4</sup>	_____
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 Windows 7 Ultimate (-W7U) 64-bit or Windows 10 Enterprise IoT (-W1064) 64-bit operating systems.

<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> Hybrid hard drives have a solid state adaptive memory cache to significantly increase read/write performance. These are rotating hard drives and do not carry any extra part warranty.

<sup>4</sup> NEMA 1 only, not recommended for environments with high levels of moisture and/or particulate matter.