

Nematron nPC300-IECEEx Fanless Industrial PC

Non-Display, High Performance Fanless Node PCs

IECEEx / ATEX Zone 2 Approved

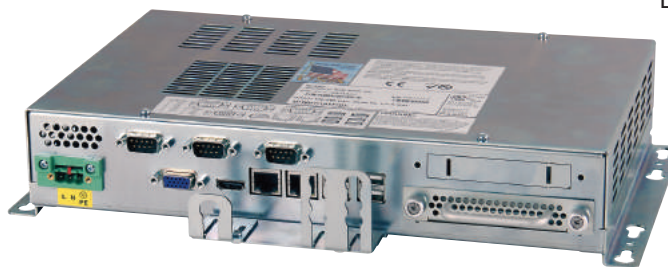
Intel® Fanless Processing

Solid State Drive Storage

55°C Operating Temp

64-bit Application Support

Mounting Options



Nematron
by COMARK

DS nPC300-N2800-IECEEx, Rev B



Optional
64-Bit
Application
Support



Made in USA

Standard Configuration

- High Performance / Very Low Power Fanless Processor
 - Intel® Dual Core ATOM N2800 (1.86 GHz, 1 MB cache, 4 Threads)
- 4 GB DRAM
- 240 GB Easily Removable SATA Solid State Drive
 - Optional larger SSD sizes
- Extensive I/O Connectivity
 - Dual Gigabit (10/100/1000) Ethernet ports
 - Two USB 2.0 ports
 - Two USB 3.0 ports
- One RS-485/422 serial port
- Two RS-232 serial ports
- Additional Analog Video port or HDMI port - supports dual video with internal LCD and one port (Optional HDMI to DVI cable available - sold separately)
- Integrated isolated 24 VDC power supply
- IECEEx and ATEX Zone 2 approved when installed in an ATEX approved enclosure as described in DEMKO 14 ATEX 1374X and UL 16.0058X
- UL and cUL Ordinary Locations Listed
- UL and cUL Hazardous Locations Listed
 - Class I Division 2, Groups A, B, C, & D when mounted in a NEMA enclosure
- FCC & European CE compliant
- Windows® 7 Professional (32-bit) pre-installed
 - Windows 7 Ultimate (32-bit) or No OS Installed optional
- 2-year Warranty

Technical Specifications



Physical

Overall Dimensions	7.750" x 12.00" x 2.15" (196.8mm x 304.8mm x 54.61mm)
Overall Dimensions w/ Mounting Brackets	7.750" x 13.30" x 2.45" (196.8mm x 337.82mm x 62.23mm)
Weight	6.5 lbs (2.9 kg)
Shipping Weight	8.0 lbs (3.6 kg)

Processor

¹ Additional Video RAM as needed with DVMT (Dynamic Video Memory Technology).

Type & Processor	ATOM N2800 Intel Dual Core ATOM N2800
Core Speed	1.86 GHz
Threads / Bus/Core	2 / 4
L2 Cache	1MB
Chipset	Intel NM10 Express
Graphics Controller	Integrated Intel GMA 3650 ¹
Ethernet Controller	Intel 82574L Gigabit 10/100/1000 (2 ports)

Storage & Peripherals

Operating System	Windows 7 Professional (32-bit); Optional Windows 7 Ultimate (32-bit), or No OS installed
DRAM	4GB Single Module (204-pin DDR3 SO-DIMM, non-ECC, unbuffered, 1066 MHz)
Standard Storage	240GB SATA Solid State Drive; Optional 480GB or 960GB Solid State Drive
Available I/O	(1) HDMI Port, (2) USB 2.0, (2) USB 3.0, (2) RS-232, (1) RS-485/422, (1) Analog Video Port (supports dual video), (2) Ethernet 10/100/1000 Ports

Power

Input Power	35W
DC Input Voltage	18-36 VDC, 6.0 A Maximum

The DEMKO certificate is available online for downloading: http://www.comarkcorp.com/atex/demko_1374x_r2.pdf

The IECEx UL certificate is available online for downloading at: http://www.comarkcorp.com/iecex/ul_16_0058x_r0.pdf

Technical Specifications

Environmental

Temperature ²	Operating 0°C to 55°C	Non-operating -20°C to 70°C
Humidity	20% to 80% RH, noncondensing	20% to 80% RH, noncondensing
Shock ³	15g peak acceleration, 11msec	30g peak acceleration, 11msec
Vibration (5-2000 Hz) ³	.006" peak to peak displacement, 1.0g maximum acceleration	.015" peak to peak displacement, 2.5g maximum acceleration
Altitude ⁴	Sea level to 10,000 feet	Sea level to 40,000 feet

² 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.

³ Shock & Vibration specifications established with Solid State drives and no rotating media.

⁴ Altitude specification is established by using all internal component specifications.

Compliance

NEMA Rating	NEMA 4/4X/12, IP66
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
IECEX Compliance	UL 16.0058X
ATEX Compliance	ATEX Zone 2 approved when installed in an approved enclosure as described in the certificate DEMKO 14 ATEX 1374X
Agency Approvals *	UL508 Listed, ANSI/ISA 12.12.01-2012, cUL Listed CSA C22.2, #142, cUL Listed CSA 22.2, #213

* nPC300-Fanless Series: Class I Division 2, Groups A, B, C, D; Temp. Code: T4A, when installed on a flat surface of a Type 1 enclosure.

Features

1. Integrated Isolated 24 VDC Power Supply
2. IECEX, ATEX ZONE 2, UL/cUL 508, Class I Div 2, CE Approval Label
3. Easily Removable SATA Solid State Drive
4. Extensive I/O Connectivity
5. USB Retention Bracket
6. Mounting Brackets
7. HDMI Cable Retention Bracket
8. Made with Pride in the USA



Standard 2-year warranty
- Covers parts and service



Order Number Generation

Base unit configuration: nPC300-N2800-4GB-240SS-W7-DC-IECEEx, includes Intel ATOM N2800, 4 GB DRAM, 240 GB SATA Solid State Drive, 24 VDC power supply, and Windows 7 Professional (32-bit).



nPC300 - N2800		-DC -IECEEx	
Processor:	N2800	Intel ATOM N2800 (Fanless)	
DRAM:	-4GB	4 GB DRAM	
Hard Drive:	-240SS -480SS -960SS	240 GB SATA Solid State Drive [†] 480 GB SATA Solid State Drive [†] 960 GB SATA Solid State Drive [†]	
Operating System:	-W7 -W7U -NOS	Windows 7 Professional (32-bit) Windows 7 Ultimate (64-bit) No OS installed	
Power Supply:	-DC	24 Volt DC	

[†] Solid State Drive options carry a 5-year (part-only) warranty.