COMARK
smarter automation

Toll Free 1-800-280-8522
Fax 508-359-2267
Local 508-359-8161

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

Nematron iPC1900-IECEx Industrial PC

19.0” High-Performance, Panel Mount, Touchscreen Computer

IECEx / ATEX Zone 2/22 Approved

Intel® Processing

LED Backlit Display

Analog Resistive Touchscreen

Solid State Drive Storage

NEMA 4/4X/12, IP66

55°C Operating Temp

64-bit Application Support



Nematron by COMARK

DS iPC1900-IECEx, Rev B

Optional 64-Bit Application Support

Made in USA

Standard Configuration

- 19.0” SXGA Color TFT LED backlit display
- High Performance / Low Power Processor options to choose from:
  - Intel® Dual Core Celeron® P4500 *(1.86 GHz, 2 M cache, 2 Threads)*
  - Intel® i5 Dual Core 520M *(2.4 GHz, 3 M cache, 4 Threads)*
  - Intel® i7 Dual Core 620M *(2.66 GHz, 4 M cache, 4 Threads)*
- 5-wire Analog Resistive Touchscreen
- 4 GB DRAM
- 240 GB Easily Removable SATA Solid State Drive
  - Optional larger SSD sizes
- Ultra-Thin panel mounting depth, less than 3.2”
- Extensive I/O Connectivity
  - Dual Gigabit *(10/100/1000)* Ethernet ports
  - 6 USB 2.0 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
- Powder Coated Aluminum Front Panel *(optional Stainless Steel)*
- NEMA 4/4x/12 front panel
- IECEx and ATEX Zone 2/22 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; Class II Division 2, Groups F & G; Class III when mounted in a NEMA enclosure
- FCC & European CE compliant
- Windows® 7 Professional (32-bit) pre-installed
  - Windows 7 Ultimate (64-bit) or No OS installed optional
- 2-year Warranty

Technical Specifications



iPC1900T-IECEx

Physical

Overall Dimensions	15.70” x 18.66” x 3.25” (398.8mm x 474.0mm x 82.6mm)
Panel Mounting Depth	3.00” (76.2mm)
Cutout Dimensions	14.90” x 17.75” (378.5mm x 450.9mm)
Weight	22.5 lbs (10.22kg)
Shipping Weight	27.5 lbs (12.49kg)
Option Weight (SS)*	+4.0 lbs (1.81kg)*

* Additional weight for Stainless Steel option.

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

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

	Celeron P4500 Intel Dual Core Celeron P4500	**i5 Dual Core** Intel i5 Dual Core 520M	**i7 Dual Core** Intel i7 Dual Core 620M
Type & Processor			
Core Speed	1.86 GHz	2.4 GHz	2.66 GHz
Threads / Bus/Core	2 / 14	4 / 18	4 / 20
L2 Cache	2MB	4MB	4MB
Chipset	Intel HM55 (BD82HM55 PCH)	Intel HM55 (BD82HM55 PCH)	Intel HM55 (BD82HM55 PCH)
Video RAM	64 MB System RAM Base [1]	64 MB System RAM Base [1]	64 MB System RAM Base [1]
Ethernet Controller	Realtek 10/100/1000 (2 ports)	Realtek 10/100/1000 (2 ports)	Realtek 10/100/1000 (2 ports)

Storage & Peripherals

Operating System	Windows 7 Professional (32-bit); Optional Windows 7 Ultimate (64-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, (6) USB 2.0, (2) RS-232, (1) RS-485/422, (1) Analog Video Port (supports dual video with integrated display), (2) Ethernet 10/100/1000 Ports

Power

Input Power	90W
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

	Operating	Non-operating
Temperature [2]	0°C to 55°C	-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 2/22 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

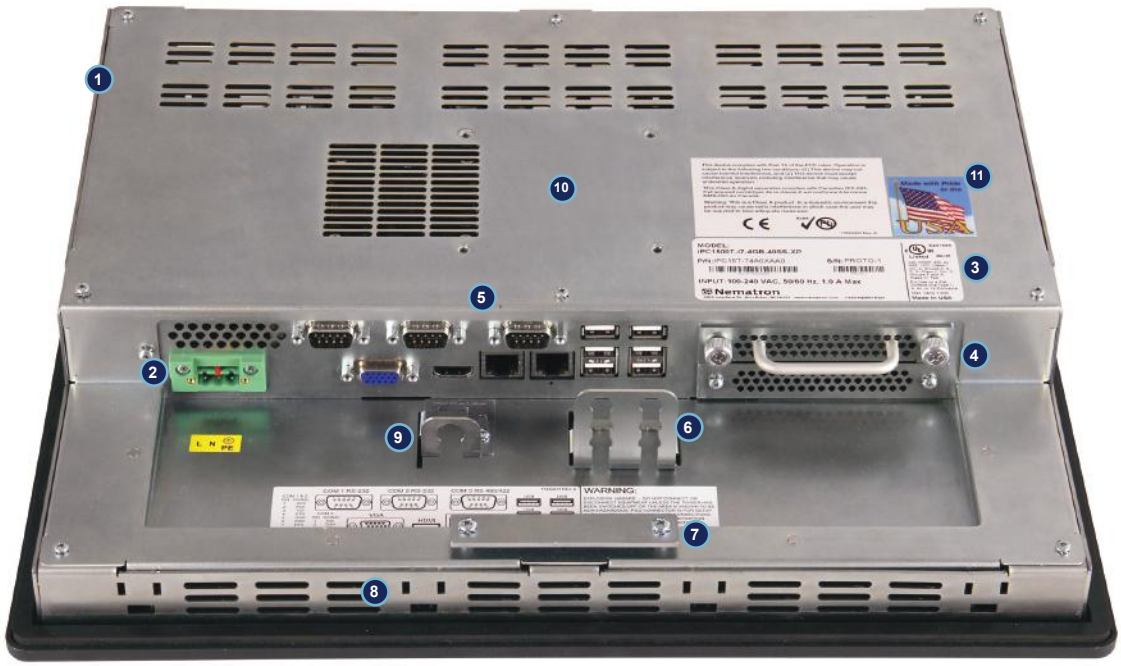
* iPC-Series: Class I Division 2, Groups A, B, C, D; Class II, Division 2, Groups F & G; Class III; Temp. Code: T6, when installed on a flat surface of a Type 1, 4, 4X, or 12 enclosure.

Front Panel

Front Panel Options	Powder-Coated Aluminum Front Panel; with No Logo; Machined 304 Stainless Steel

Features

1. 5-wire Analog Resistive Touchscreen
2. Integrated Isolated 24 VDC Power Supply
3. IECEx, ATEX ZONE 2/22, UL/cUL 508, Class I Div 2, CE Approval Label
4. Easily Removable SATA Solid State Drive
5. Extensive I/O Connectivity
6. USB Retention Bracket
7. USB & Ethernet Cord Hold Down
8. Panel Mounting via Clips
9. HDMI Cable Retention Bracket
10. VESA Mounting iPC1900 - 100mm
11. Made with Pride in the USA



2YR. WARRANTY

Standard 2-year warranty
- Covers parts and service

Order Number Generation

Base unit configuration: iPCxx00T-CP45-4GB-240SS-W7-DC-ATEX, where xx = 12, 15, 17, or 19 (for display size), includes a touchscreen, Intel Celeron P4500 processor, 4 GB DRAM, 240 GB SATA Solid State Drive, isolated 24 VDC power supply, and Windows 7 Professional (32-bit).


iPC1900T-IECEx

iPC1900 T - ___ ___ ___ ___ -DC ___ -IECEx

Display Size:
- **1900** — 19.0" SXGA LCD

Input:
- **T** — Touchscreen

Processor:
- **CP45** — Intel Celeron P4500
- **i5** — Intel i5 520M
- **i7** — Intel i7 620M

DRAM:
- **-4GB** — 4 GB DRAM

Hard Drive:
- **-240SS** — 240 GB SATA Solid State Drive [1]
- **-480SS** — 480 GB SATA Solid State Drive [1]
- **-960SS** — 960 GB SATA Solid State Drive [1]

Operating System:
- **-W7** — Windows 7 Professional (32-bit)
- **-W7U** — Windows 7 Ultimate (64-bit)
- **-NOS** — No OS installed

Power Supply:
- **-DC** — Isolated 24 Volt DC

Front Panel:
- **blank** — Powder Coated Aluminum
- **-NL** — Powder Coated Aluminum w/o Logo
- **-SS** — Machined 304 Stainless Steel

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

Comark and its associated logos are trademarks of Comark LLC. All other product, logos, or service names are the property of their respective owners. © Comark 2016