Can you afford to risk your business on the wrong industrial computer choice?

Nematron CAN HELP

Nematron — providing confidence in industrial computer products.

NEMATRON

Nematron

Tackle Your Industrial PC Needs with A Proven Brand.

Nematron has been in the industrial computer industry for decades, and we constantly address the issues and concerns that you face in your applications so that you can have complete confidence in choosing our industrial computer products. You can be confident in Nematron because:

- ***Our products are designed, assembled, and serviced with pride in the USA.***
- ***Our experienced sales professionals work closely with our design engineers to monitor industry changes and trends.***
- ***We have exceptionally short lead times and repair turn-around times.***
- ***We have solutions that are UL/cUL listed for Class I & Class II Division 2 Hazardous Locations.***
- ***Our products are time-tested and proven with thousands of installations worldwide.***

HAZARDOUS LOCATIONS SOLUTIONS
Class I & Class II Division 2

Most Nematron industrial computer products are suitable for use in hazardous locations. They are also UL/cUL listed for safety, and comply with FCC, European CE, and RoHS requirements. Our UL 508 listed products integrate easily into your UL 508A listed control panel reducing certification costs and paperwork.

SPACE CONSTRAINED SOLUTIONS
Say "NO!" to big, bulky, and expensive PCs

Are you dealing with space constrained applications? Nematron's ultra-thin industrial computer and monitor products require minimal panel space and depth. The M-Series monitors and ePC-Series Industrial PCs are some of the thinnest available, allowing for smaller enclosures and lower panel costs.

DEMAND FOR LONG-TERM AVAILABILITY WITH RELIABLE, HIGH PERFORMANCE SOLUTIONS

To keep industrial machinery running long term, "Commercial" PCs that are discontinued in months should not be used. For years of long term product availability, Nematron adheres to the Intel® embedded roadmaps.

Our Intel processor solutions maintain a high standard of system performance with low internal heat generation, thereby increasing long-term reliability of the overall system.

HARSH ENVIRONMENT SOLUTIONS
Temperature, Shock, and Vibration

The Nematron difference is obvious. For nearly 30 years now, we have been designing and testing products to survive in harsh environmental extremes.

5-Year Solid State Drive Warranty
Want extra confidence? Our standard Intel® Solid State drives are designed to withstand temperature, shock and vibration better than rotating hard drives, and they are backed by an unprecedented 5-year part warranty!

PC FORM FACTOR & I/O OPTION SOLUTIONS NOT AVAILABLE IN "COMMERCIAL" PCs

What do you do when the PC you use on your machine no longer provides the right form factor to keep it running? Look to Nematron for dual Gigabit Ethernet ports, RS-232, RS-485, RS-422, USB ports, PCI card slots, and additional video port for simultaneous video. These solutions are simply not available in many of today's "Commercial" PCs.

SERVICEABILITY AND REPAIR SOLUTIONS

Nematron industrial computer products feature easily removable hard drives and DVD-R/W drives for simple maintenance jobs.

2-Year System Warranty
We are committed to providing you top quality products and services, including 2-year factory warranty coverage. Our U.S. based manufacturing, service and support center delivers fast turnaround on repairs, and continues to repair decades old workstations as our demonstrated committment to supporting our customers.

Pioneering Innovative Computer & Visualization Solutions.

Nematron invented the first NEMA panel mounted industrial computer and operator interface nearly 30 years ago. Since then we have been pioneering and setting the standards for Industrial computer products – and this tradition of excellence continues.

Today, Nematron has thousands of systems installed worldwide and continues to develop innovative, new solutions. Our customers benefit from reduced life-cycle costs, improved machine or process flexibility, and improved integration of manufacturing-generated information into enterprise level systems.

Industry-leading Solutions. *Second to none.*

Embedded Industrial PCs w/ Display

- 12.1"-19" Displays
- NEMA 4/4X/12
- Fanless Options
- Intel-based CPUs
- Solid State Drives

Class I Div 2 Approved

Class I Div 2 Approved

VALUE — ePC15T "Lite" — ePC-Series — ePC-Plus Series — PERFORMANCE

Embedded Industrial PCs w/o Display

- Fanless Options
- Intel-based CPUs
- Solid State Drives

Class I Div 2 Approved

Class I Div 2 Approved

VALUE — nPC100 — nPC200 — PERFORMANCE

Industrial Flat Panel Monitors

- 12.1" to 22.0" Displays
- NEMA 4/4X/12

Class I Div 2 Approved

SVGA — M-Series — WSXGA+ Widescreen

Shoebox and Rackmount PCs

- Commercial Alternatives
- Intel-based CPU
- Solid State Drive Options

COMPACT — SB800 — RM1400 — RACKMOUNT

Operator Interface Panels

- NEMA 4/12
- Character-based up to 15" Graphic

VALUE — OptiMate 400/600/1000 — PowerView 6000/8000 — PERFORMANCE

ePC15T "Lite"

FANLESS Processor & Solid State Drive

- ***Low-Cost, High Performance***
- ***Thin Mounting Depth***
- ***Flexible I/O Connectivity***
- ***Ideal for Space-Limited Applications***

- 15-inch LCD Touchscreen Display
- XGA Resolution, 1024 x 768
- High reliability and durability
- Intel® High-Performance, Very Low-Power Fanless Processor
- Intel SATA Solid State Drive
- 2GB DRAM Standard
- I/O Connectivity panel
  - *One 10/100/1000 Ethernet port*
  - *Three USB 2.0 ports*
  - *One RS-232 serial port*
- Powder-Coated Aluminum Front Panel
- NEMA-rated 4/4x/12 Front Panel
- Ultra-thin Panel Mounting Depth of 2.4"
- Windows® XP™ Professional Operating System

Computer Features

Fanless / Low-Heat Processor Option
- *Intel® ATOM™ N270 (1.6 GHz, 512 K cache, 533 MHz bus)*

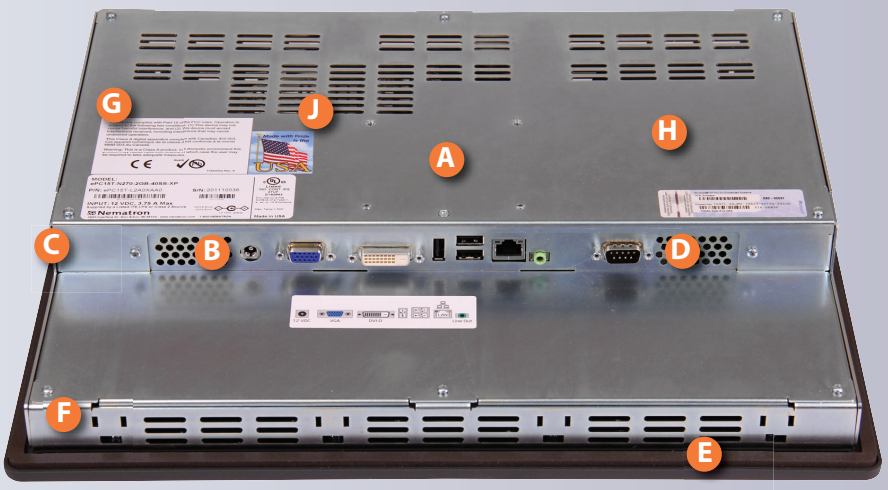
Intel SATA Solid State Drive

External 100-240 VAC Power Supply
- *Regulated 12 VDC, 3.75 A Max output*

5-wire Analog Resistive Touchscreen

Powder-Coated Aluminum Front Panels
- *Optional NEMA 1 powder coated rear enclosure (vented, not water or dust proof)*

NEMA Panel Mounting via Clips



A. VESA Mounting Threads (75mm)
B. External 100-240 VAC Power Supply
C. Ultra-Thin Compact Design
D. I/O Connectivity panel
E. NEMA 4/4X/12 Front Panel Gasket
F. Easy Panel Mounting Clip Slots
G. UL508, cUL, CE, and RoHS Approval labels
H. Rugged Industrial Chassis Design
J. Made with Pride in the USA

Models At A Glance

ePC15T

Resolution XGA, 1024x768
Display Size 11.97" x 8.98"
Cutout 15.00" x 12.00"

ePC15T-EN (enclosed)

Enclosure Rating NEMA 1
VESA 75mm (M4 Threads)
Optional No Logo Front Panel

Other Enclosed Monitors and PCs

Nematron offers a number of standard PCs and Monitors with Enclosures, providing a level of protection that open-back PCs and Monitors do not provide. Enclosures are vented and NEMA 1 Approved (not water or dust proof).

- **M1500T-EN** - 15-inch M-Series Flat Panel Monitor with Touchscreen
- **M1900T-EN** - 19-inch M-Series Flat Panel Monitor with Touchscreen
- **ePC15T-EN** - 15-inch ePC Lite Industrial PC with Touchscreen
- **ePC1500T-EN** - 15-inch ePC-Series Industrial PC with Touchscreen
- **ePC1900T-EN** - 19-inch ePC-Series Industrial PC with Touchscreen
- **ePC1550T-EN** - 15-inch ePC-Plus Series Industrial PC with Touchscreen

Technical Specifications

*e*PC15T "Lite"

Physical	ePC15T	ePC15T-EN
Overall Dimensions *H x W x D*	12.80" x 15.80" x 2.65" (325.1mm x 401.3mm x 67.3mm)	12.80" x 15.80" x 2.65" (325.1mm x 401.3mm x 67.3mm)
Panel Mounting Depth	2.4" (60.9mm)	N/A *(for stand-alone VESA mounting)*
Cutout Dimensions *H x W*	12.00" x 15.00" (305.0mm x 381.0mm)	N/A *(for stand-alone VESA mounting)*
Weight	14 lbs (6.35kg)	14 lbs (6.35kg)
Shipping Weight	19.0 lbs (8.62kg)	19.0 lbs (8.62kg)

COMMON SPECS

Option codes in (red). See product configurators on pages 18 & 19. For descriptions and usage, download technical datasheet.

Display

Display Diagonal	15.0" (381.0mm)
Display Size *Active Area H x V*	11.97" x 8.98" (304.0mm x 228.1mm)
Native Resolution	XGA, 1024 x 768
Brightness / Contrast Ratio	250 nit / 700:1
Horz/Vert Viewing Angle	170°/160°
Backlight Life / Typical	50,000 hrs

Processor Options

Type & Processor	Intel ATOM N270 *(Fanless)* (N270)
Core Speed	1.6 GHz
L2 Cache	512k
Front Side Bus	533 MHz
Chipset	Intel 945GSE + ICH7M
Ethernet Controller	Realtek 10/100/1000 *(1 port)*

Memory, Storage and I/O

DRAM	2GB Single Module (-2GB) *(200-pin DDR2 SO-DIMM, non-ECC, unbuffered, 533 MHz)*
Standard Storage	Intel 40GB SATA Solid State Drive (-40SS)
Available I/O	(3) USB 2.0, (1) RS-232, (1) Digital Video (DVI) Port, (1) Analog Video Port *(supports dual video)*, (1) Audio Out, (1) Ethernet 10/100/1000 Port

Touchscreen

Technology	5-wire Analog Resistive (T)

Operating System

Standard OS	Windows XP Professional (-XP); Optional Windows 7 Professional 32-bit (-W7)

Electrical

Input Power	30 W Typical [1]
AC Power Supply	100-240 VAC, 47-63 Hz, 1.1 A Maximum
DC Input Voltage/Max Current	12 VDC, Regulated ± 5%, 3.75 A Maximum [2]

[1] Typical power is measured per model/per processor and without any additional I/O or expansion inputs. Any additional I/O installed during application can increase this value.
[2] Output of included AC power supply. Can also be powered by other Listed ITE power supply or Class 2 Power sources.

Environmental	Operating	Non-operating
Temperature	0°C to 50°C	-20°C to 60°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

[3] Shock & Vibration specifications established with Solid State drives and no rotating media.
[4] Altitude specification is established by using all internal component specifications.

Agency Approvals

Front Panel NEMA Rating	NEMA 4/4X/12, IP65
Enclosure Rating [5]	NEMA 1 *(vented, not dust or water proof, for stand-alone VESA mounting)* (-EN)
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, RoHS compliant
Safety Agency Approvals	UL508 Listed, cUL Listed CSA C22.2, #142

[5] 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 (blank); with No Logo (-NL)

ePC-Series

Class I Div 2 Approved

Covers Parts & Labor

- ***Class I, Div 2 Approved***
- ***Thin Mounting Depth***
- ***Easily Removable Storage Media***

Intel FANLESS Processor Option

- 12.1″ SVGA to 19″ SXGA Color TFT LCD Display *(No display on the nPC100 Node PC)*
- 5-wire Analog Resistive Touchscreen
- Intel® High-Performance Processor options
- Intel 40GB Easily Removable SATA Solid State Drive
- 2GB DRAM Standard
- Extensive I/O Connectivity panel
- Powder-Coated Aluminum Front Panel
- NEMA 4/4x/12 Front Panel
- UL and cUL Ordinary Locations Listed
- UL and cUL Hazardous Locations Listed

Computer Features

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 / Low-Heat Processor Option
- *Intel® ATOM™ N270 (1.6 GHz, 512 K cache, 533 MHz bus)*

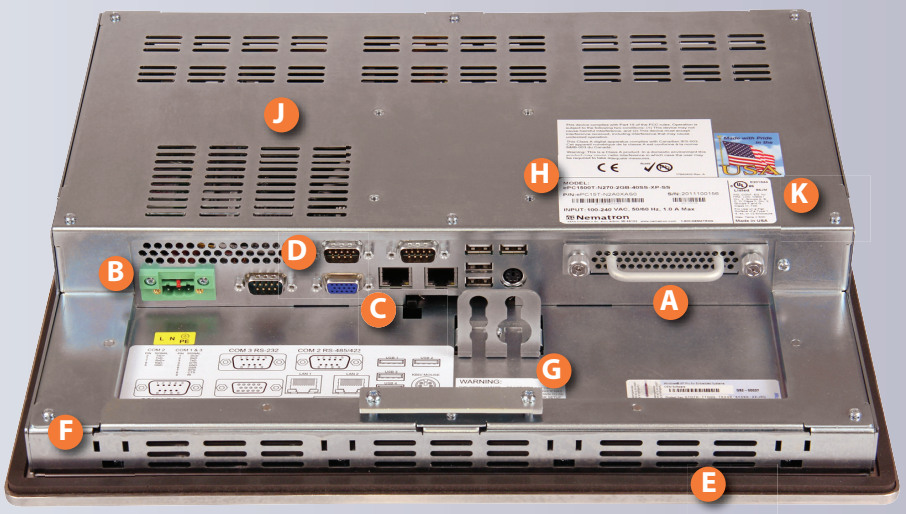
Intel Easily Removable SATA Solid State Drive
- *Larger Sizes or Conventional HD Optional*

5-wire Analog Resistive Touchscreen
- *Optional clear Lexan window*

CompactFlash™ to replace CD-ROM and floppy drive

Powder-Coated Aluminum or optional Stainless Steel Front Panels

NEMA Panel Mounting via Clips



A. Easily Removable Storage Drive
B. Integral 100-240 VAC or optional 24 VDC Power Supply
C. CompactFlash Slot
D. I/O Connectivity panel
E. NEMA 4/4X/12 Front Panel Gasket
F. Easy Panel Mounting Clip Slots
G. USB, Ethernet, & PS/2 Cord Hold Down
H. UL508, cUL, Class I Div 2, CE, and RoHS Approval labels
J. Rugged Industrial Chassis Design
K. Made with Pride in the USA

Models At A Glance

ePC1200T

Resolution SVGA, 800x600
Display Size 9.69″ x 7.26″
Cutout 12.10″ x 9.68″

ePC1500T

ePC1500T-EN *(enclosed)*

Resolution XGA, 1024x768
Display Size 11.97″ x 8.98″
Cutout 15.00″ x 12.00″

ePC1700T

Resolution SXGA, 1280x1024
Display Size 13.30″ x 10.64″
Cutout 16.35″ x 13.70″

ePC1900T

ePC1900T-EN *(enclosed)*

Resolution SXGA, 1280x1024
Display Size 14.82″ x 11.85″
Cutout 17.75″ x 14.90″

nPC100 Node PC

Overall 7.750″ x 12.00″ x 2.15″
Overall with Mounting Brackets 7.750″ x 13.30″ x 2.45″

Technical Specifications

*e*PC-Series/*n*PC100





Physical	ePC1200	ePC1500	ePC1700	ePC1900	nPC100
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)	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)
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)	-
Weight	10.5 lbs (4.76kg)	15.0 lbs (6.80kg)	19.0 lbs (8.63kg)	22.5 lbs (10.22kg)	6.5 lbs (2.9 kg)
Shipping Weight	14.0 lbs (6.35kg)	19.5 lbs (8.84kg)	23.5 lbs (10.67kg)	27.5 lbs (12.49kg)	8.0 lbs (3.6 kg)
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.*

Display	ePC1200	ePC1500	ePC1700	ePC1900	nPC100
Display Diagonal	12.1" (307.34mm)	15.0" (381.0mm)	17.0" (431.8mm)	19.0" (482.6mm)	-
Display Size *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	-
Brightness / Contrast Ratio	400 nit / 500:1	300 nit / 800:1	380 nit / 1000:1	300 nit / 2000:1	-
Horz/Vert Viewing Angle	130°/110°	150°/145°	170°/170°	178°/178°	-
Backlight Life / Typical	50,000 hrs	50,000 hrs	50,000 hrs	50,000 hrs	-

Typical* Power	ePC1200	ePC1500	ePC1700	ePC1900	nPC100
ATOM N270 (fanless)	30W	30W	40W	50W	20W
Celeron M440/Core Duo T2500	50W	50W	60W	70W	40W

** Typical power is measured per model/per processor and without any additional I/O or expansion inputs. Any additional I/O installed during application can increase this value.*

COMMON SPECS

Option codes in (red). See product configurators on pages 18 & 19. For descriptions and usage, download technical datasheet.

Processor Options	ATOM N270 (Fanless)	Celeron M 440	Core Duo T2500
Type & Processor	Intel ATOM N270 (N270)	Intel Celeron M 440 (CM440)	Intel Core Duo T2500 (T2500)
Core Speed	1.6 GHz	1.86 GHz	2.0 GHz
L2 Cache	512k	1MB	2MB
Front Side Bus	533 MHz	533 MHz	667 MHz
Chipset	Intel 945GSE + ICH7M	Intel 945GME + ICH7M	Intel 945GME + ICH7M
Ethernet Controller	Realtek 10/100/1000 (2 ports)	Broadcom 10/100/1000 (2 ports)	Broadcom 10/100/1000 (2 ports)

Memory, Storage and I/O	
DRAM	2GB Single Module (-2GB) *(200-pin DDR2 SO-DIMM, non-ECC, unbuffered, 533 MHz)*
Standard Storage	Intel 40GB SATA Solid State Drive (-40SS)
Optional Storage	80GB (-80SS) or 160GB (-160SS) Solid State Drive; 250GB SATA Conventional Hard Drive (blank)
Available I/O	(4) USB 2.0, Type I/II CompactFlash, (2) RS-232, (1) RS-485/422 (jumper selectable), (1) Analog Video Port (supports dual video), (2) Ethernet 10/100/1000 Ports, (1) PS/2 port [1]

[1] PS/2 not allowed for hazardous locations usage. Set up and maintenance use only.

Touchscreen	
Technology	5-wire Analog Resistive (T) *(Not applicable to the nPC100 model)*; No Touchscreen option (blank)

Operating System	
Standard OS	Windows XP Professional (-XP); Optional Windows 7 Professional 32-bit (-W7) or No OS installed (-NOS)

Electrical	
AC Input Voltage/Max Current	100-240 VAC, 50-60 Hz, 1.0 A Maximum (blank)
DC Input Voltage/Max Current	18-36 VDC, 4.5 A Mazimum (-DC)

Environmental	Operating	Non-operating
Temperature / Humidity	0°C to 50°C / 20% to 80% RH, noncondensing	-20°C to 60°C / 20% to 80% RH, noncondensing
Shock [2]	15g peak acceleration, 11msec	30g peak acceleration, 11msec
Vibration *(5-2000 Hz)* [2]	.006" peak to peak displacement, 1.0g maximum acceleration	.015" peak to peak displacement, 2.5g maximum acceleration
Altitude [3]	Sea level to 10,000 feet	Sea level to 40,000 feet

[2] Shock & Vibration specifications established with Solid State drives and no rotating media. [3] Altitude specification is established by using all internal component specifications.

Agency Approvals	
Front Panel NEMA Rating	NEMA 4/4X/12, IP65
Enclosure Rating [4]	NEMA 1 *(vented, not dust or water proof, for stand-alone VESA mounting - ePC1500 & 1900 only)* (-EN)
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, RoHS compliant
Safety Agency Approvals *	UL508 Listed, UL 1604 Listed , cUL Listed CSA C22.2, #142, cUL Listed CSA 22.2, #213 *(see notes below on model-specific Hazardous Locations approvals)*

** **ePC-Series:** Class I Division 2, Groups A, B, C, D; Class II, Division 2, Groups F & G; Class III; Temp. Code: T4A, when installed on a flat surface of a Type 1, 4, 4X, or 12 enclosure.*
** **nPC100:** Class I Division 2, Groups A, B, C, D; Temp. Code: T4A, when installed on a flat surface of a Type 1 enclosure.*
**** Enclosed units (ePC1500 & 1900):** UL1604, cUL CSA C22.2, #213 not applicable to units with -EN option.*
[4] 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 (blank); with No Logo (-NL); Machined 304 Stainless Steel (-SS); Rackmount Powder Coated Aluminum (-RM) *(ePC1900 only)* [5]

[5] 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.

ePC-Plus Series

Class I Div 2 Approved | Covers Parts & Labor | RoHS compliant

Standard PCI Expansion & RAID Option

- 15" XGA to 19" SXGA Color TFT LCD Display
  (No display on the nPC200 Node PC)
- 5-wire Analog Resistive Touchscreen
- Intel® High-Performance Processor options
- Intel 40GB Easily Removable SATA Solid State Drive
- Second Drive Option
  - Optional RAID Level 1 configuration (XP only)
- 2GB DRAM Standard (4GB max)
- Extensive I/O Connectivity panel
- NEMA 4/4x/12 Front Panel
- UL and cUL Ordinary Locations Listed
- UL and cUL Hazardous Locations Listed

- ***Class I, Div 2 Approved***
- ***High-Performance Processor Options***
- ***Easily Removable Storage Media***

Computer Features

High-Performance / Low-Power Processor Options
- Intel® Mobile Celeron® 550 (2.0 GHz, 1 M cache, 533 MHz bus)
- Intel® Core Duo™ T7500 (2.2 GHz, 4 M cache, 800 MHz bus)

Intel Easily Removable SATA Solid State Drives
- Optional Rotating Drives
- Optional RAID Level 1 (mirroring with Windows XP OS only)

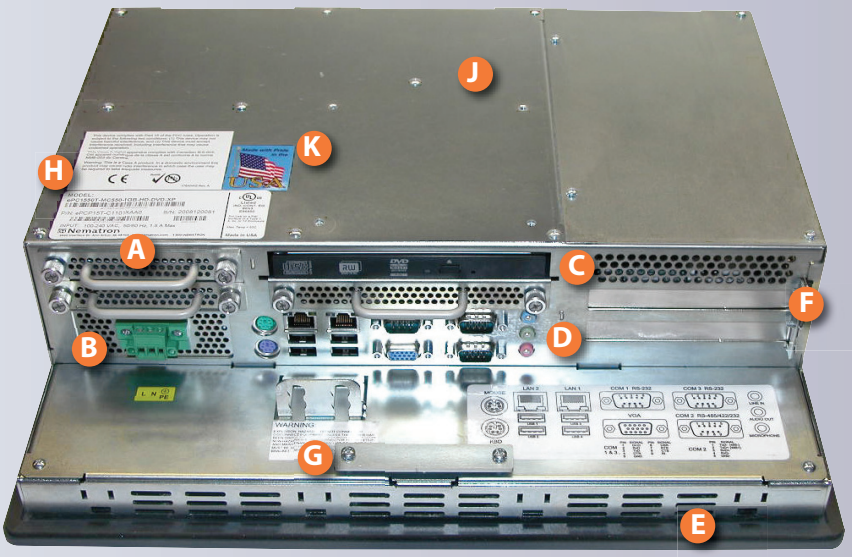
5-wire Analog Resistive Touchscreen
- Optional clear Lexan window

Two PCI-card Expansion Slots
- 8.75" max length

Hot-swappable, Easily Removable DVD-R/W Drive

Powder-Coated Aluminum or optional Stainless Steel Front Panels

NEMA Panel Mounting via Clips



A. Easily Removable Storage Drives
B. Integral 100-240 VAC or optional 24 VDC Power Supply
C. Hot-swappable, easily removable DVD-R/W Drive
D. I/O Connectivity panel
E. NEMA 4/4X/12 Front Panel Gasket
F. Two PCI-card Expansion Slots
G. USB, Ethernet, & PS/2 Cord Hold Down
H. UL508, cUL, Class I Div 2, CE, and RoHS Approval labels
J. Rugged Industrial Chassis Design
K. Made with Pride in the USA

Models At A Glance

ePC1550T

Resolution XGA, 1024x768
Display Size 11.97" x 8.98"
Cutout 15.00" x 12.00"

ePC1550T-EN (enclosed)

Resolution XGA, 1024x768
Display Size 11.97" x 8.98"
Enclosure Rating NEMA 1

ePC1750T

Resolution SXGA, 1280x1024
Display Size 13.30" x 10.64"
Cutout 16.35" x 13.70"

ePC1950T

Resolution SXGA, 1280x1024
Display Size 14.82" x 11.85"
Cutout 17.75" x 14.90"

nPC200 Node PC

Overall 9.00" x 15.00" x 3.34"
Overall with Mounting Brackets 9.00" x 16.30" x 3.65"

Technical Specifications

*e*PC-Plus Series/*n*PC200




Physical	ePC1550	ePC1750	ePC1950	nPC200
Overall Dimensions *H x W x D*	12.80" x 15.80" x 4.55" (325.1mm x 401.3mm x 115.6mm)	14.48" x 17.14" x 4.55" (367.8mm x 435.4mm x 115.6mm)	15.70" x 18.66" x 4.70" (398.8mm x 474.0mm x 119.4mm)	9.00" x 15.00" x 3.34" (228.6mm x 381.0mm x 84.8mm)
Overall Dimensions w/ Mounting Brackets	-	-	-	9.00" x 16.30" x 3.65" (228.6mm x 414.0mm x 92.71mm)
Panel Mounting Depth	4.3" (109.2mm)	4.3" (109.2mm)	4.45" (113.0mm)	-
Cutout Dimensions *H x W*	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)	-
Weight	20.0 lbs (9.07kg)	24.0 lbs (10.88kg)	28.0 lbs (12.70kg)	12.0 lbs (5.4kg)
Shipping Weight	25.0 lbs (11.33kg)	29.0 lbs (13.15kg)	33.0 lbs (14.96kg)	14.0 lbs (6.4kg)
Option Weight *(SS)**	+3.5 lbs (1.58kg)*	+3.75 lbs (1.70kg)*	+4.0 lbs (1.81kg)*	-

** Additional weight for Stainless Steel option.*

Display	ePC1550	ePC1750	ePC1950	nPC200
Display Diagonal	15.0" (381.0mm)	17.0" (431.8mm)	19.0" (482.6mm)	-
Display Size *Active Area H x V*	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" (376.4mm x 301.0mm)	-
Native Resolution	XGA, 1024 x 768	SXGA, 1280 x 1024	SXGA, 1280 x 1024	-
Brightness / Contrast Ratio	300 nit / 800:1	380 nit / 1000:1	300 nit / 2000:1	-
Horz/Vert Viewing Angle	150°/145°	170°/170°	178°/178°	-
Backlight Life / Typical	50,000 hrs	50,000 hrs	50,000 hrs	-

Typical* Power	ePC1550	ePC1750	ePC1950	nPC200
Input Power	70W	80W	90W	60W

** Typical power is measured per model/per processor and without any additional I/O or expansion inputs. Any additional I/O installed during application can increase this value.*

COMMON SPECS

Option codes in (red). See product configurators on pages 18 & 19. For descriptions and usage, download technical datasheet.

Processor Options	Mobile Celeron 550	Core 2 Duo T7500
Type & Processor	Intel Mobile Celeron 550 (MC550)	Intel Core 2 Duo T7500 (T7500)
Core Speed	2.0 GHz	2.2 GHz
L2 Cache	1MB	4MB
Front Side Bus	533 MHz	800 MHz
Chipset	Intel 965GME + ICH8M	Intel 965GME + ICH8M
Ethernet Controller	Intel 10/100/1000 (2 ports)	Intel 10/100/1000 (2 ports)

Memory, Storage and I/O	
DRAM	2GB Single Module (-2GB) *(200-pin DDR2 SO-DIMM, non-ECC, unbuffered, 667 MHz)*; Optional 4GB max (-4GB)
Drive 1	Intel 40GB SATA Solid State Drive (-40SS); 80GB (-80SS) and 160GB (-160SS) Solid State Drives optional; 250GB SATA Conventional Hard Drive (-HD)
Drive 2	Intel 40GB SATA Solid State Drive (-40SS); 80GB (-80SS) and 160GB (-160SS) Solid State Drives optional; 250GB SATA Conventional Hard Drive (-HD); RAID Level 1 Mirroring (-RAID)
Optical Drive	1 DVD-R/W drive (-DVD); No optical drive installed option (cover plate only) (blank)
Available I/O	(4) USB 2.0, Mouse & keyboard ports [1], (2) RS-232, (1) RS-485/422 (jumper selectable), (1) Analog Video Port (supports dual video), Line In/Audio Out/Mic ports [1]; (2) Ethernet 10/100/1000 ports
Expansion Capability	(2) 8.75" max length PCI slots

[1] PS/2 and Audio ports not allowed for hazardous locations usage. Set up and maintenance use only.

Touchscreen	
Technology	5-wire Analog Resistive (T) *(Not applicable to the nPC200 model)*; No Touchscreen option (blank)

Operating System	
Standard OS	Windows XP Professional (-XP) ; Optional Windows 7 Professional 32-bit (-W7) or No OS installed (-NOS)

Electrical	
AC Input Voltage/Max Current	100-240 VAC, 47-63 Hz, 2.0 A Maximum (blank)
DC Input Voltage/Max Current	18-36 VDC, 7.5 A Mazimum (-DC)

Environmental	Operating	Non-operating
Temperature	0°C to 50°C	-20°C to 60°C
Humidity	20% to 80% RH, noncondensing	20% to 80% RH, noncondensing
Shock [2]	15g peak acceleration, 11msec	30g peak acceleration, 11msec
Vibration *(5-2000 Hz)* [2]	.006" peak to peak displacement 1.0g maximum acceleration	.015" peak to peak displacement 2.5g maximum acceleration
Altitude [3]	Sea level to 10,000 feet	Sea level to 40,000 feet

[2] Shock & Vibration specifications established with Solid State drives and no rotating media. [3] Altitude specification is established by using all internal component specifications.

Agency Approvals	
Front Panel NEMA Rating	NEMA 4/4X/12, IP65
Enclosure Rating [4]	NEMA 1 *(vented, not dust or water proof, for stand-alone VESA mounting - ePC1550 only)* (-EN)
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, RoHS compliant
Safety Agency Approvals *	UL508 Listed, UL 1604 Listed , cUL Listed CSA C22.2, #142, cUL Listed CSA 22.2, #213 *(see notes below on model-specific Hazardous Locations approvals)*

** **ePC-Plus Series:** Class I Division 2, Groups A, B, C, D; Class II, Division 2, Groups F & G; Class III; Temp. Code: T4A, when installed on a flat surface of a Type 1, 4, 4X, or 12 enclosure.*
** **nPC200:** Class I Division 2, Groups A, B, C, D; Temp. Code: T4A, when installed on a flat surface of a Type 1 enclosure.*
** **Enclosed units (ePC1550):** UL1604, cUL CSA C22.2, #213 not applicable to units with -EN option.*
[4] 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 (blank); with No Logo (-NL); Machined 304 Stainless Steel (-SS); Rackmount Powder Coated Aluminum (-RM) *(ePC1950 only)* [5]

[5] 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.

M-Series

Class I Div 2 Approved · CE · cULus · 2YR WARRANTY Covers Parts & Labor · RoHS compliant

- ***Class I, Div 2 Approved***
- ***Thin Mounting Depth***
- ***Superb Resolution, Reliability and Value***
- ***NEMA-Rated 4/4X/12 Front Panels***

Five Sizes from 12.1" to 22.0" High Res Widescreen

- 12.1" SVGA to 22.0" WSXGA+ Color TFT LCD Display
- 5-wire Analog Resistive Touchscreen
- Integral 100-240 VAC Power Supply
- VESA Compliant - modes up to WSXGA+, 16 million colors *(depends on size chosen)*
- Accepts analog 15-pin video input or DVI input
- Ultra-thin Panel Mounting Depth
- Powder-Coated Aluminum Front Panel
- NEMA 4/4x/12 Front Panel
- UL and cUL Ordinary Locations Listed
- UL and cUL Hazardous Locations Listed

Monitor Features

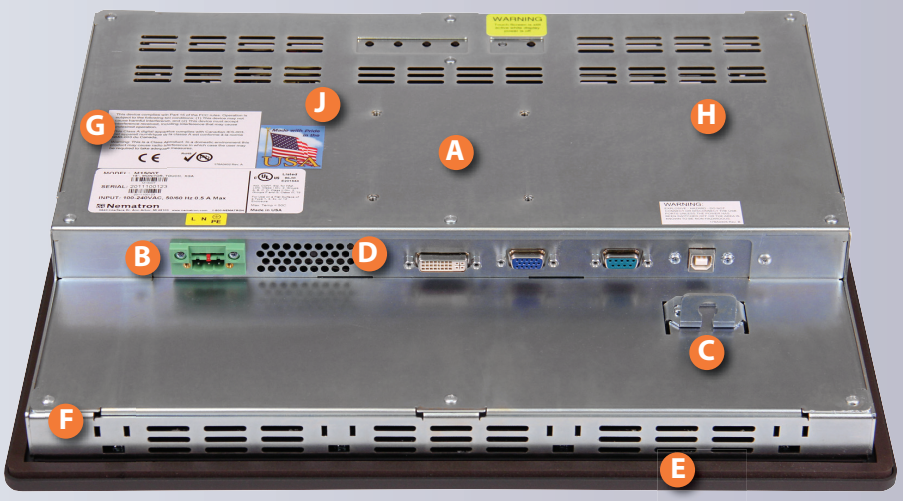
5-wire Analog Resistive Touchscreen
- Optional clear Lexan window

USB Touchscreen Cable Retention Bracket
- Required when installed in Hazardous Locations

Powder-Coated Aluminum or optional Stainless Steel Front Panels (n/a on M2200W)

NEMA Panel Mounting via Clips

VESA Mounting (M4 Threads)
- M1200/M1500/M1700: 75x75mm
- M1900/M2200W: 100x100 mm



A. VESA Mounting Threads
B. Integral 100-240 VAC or optional 24 VDC Power Supply
C. USB Touchscreen Cable Retention Bracket
D. I/O Connectivity panel
E. NEMA 4/4X/12 Front Panel Gasket
F. Easy Panel Mounting Clip Slots
G. UL508, cUL, Class I Div 2, CE, and RoHS Approval labels
H. Rugged Industrial Chassis Design
J. Made with Pride in the USA

Models At A Glance

M1200T

Resolution SVGA, 800x600
Display Size 9.69" x 7.26"
Cutout 12.10" x 9.68"

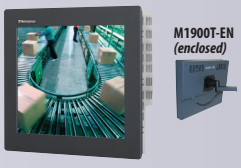
M1500T

Resolution XGA, 1024x768
Display Size 11.97" x 8.98"
Cutout 15.00" x 12.00"

M1700T

Resolution SXGA, 1280x1024
Display Size 13.30" x 10.64"
Cutout 16.35" x 13.70"

M1900T



Resolution SXGA, 1280x1024
Display Size 14.82" x 11.85"
Cutout 17.75" x 14.90"

M2200WT

Resolution WSXGA+, 1680x1050
Display Size 18.65" x 11.65"
Cutout 21.2" x 14.20"

M-Series

Technical Specifications





Physical	M1200T	M1500T	M1700T	M1900T	M2200WT
Overall Dimensions *H x W x D*	10.475" x 12.9" x 2.65" (266.1mm x 327.7mm x 67.3mm)	12.80" x 15.80" x 2.65" (325.1mm x 401.3mm x 67.3mm)	14.48" x 17.14" x 2.85" (367.8mm x 442.0mm x 72.4mm)	15.70" x 18.66" x 2.95" (398.8mm x 474.0mm x 75.0mm)	15.00" x 22.00" x 2.95" (381.0mm x 558.8mm x 75.0mm)
Panel Mounting Depth	2.4" (61.0mm)	2.4" (61.0mm)	2.6" (66.0mm)	2.7" (68.6mm)	2.7" (68.6mm)
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)	14.2" x 21.2" (360.68mm x 538.48mm)
Weight	9.5 lbs (4.31kg)	14.0 lbs (6.35kg)	18.5 lbs (8.39kg)	22.5 lbs (10.21kg)	23.0 lbs (10.43kg)
Shipping Weight	13.0 lbs (5.89kg)	19.0 lbs (8.62kg)	23.5 lbs (10.66kg)	27.5 lbs (12.47kg)	30.0 lbs (13.60kg)
Option Weight *(SS)**	+2.5 lbs (1.13kg)*	+3.5 lbs (1.58kg)*	+3.75 lbs (1.70kg)*	+4.0 lbs (1.81kg)*	N/A

** Additional weight for Stainless Steel option.*

Display	M1200T	M1500T	M1700T	M1900T	M2200WT
Display Diagonal	12.1" (307.34mm)	15.0" (381.0mm)	17.0" (431.8mm)	19.0" (482.6mm)	22.0" (558.8mm)
Display Size *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" (376.4mm x 301.0mm)	18.65" x 11.65" (473.8mm x 296.1mm)
Native Resolution	SVGA, 800 x 600	XGA, 1024 x 768	SXGA, 1280 x 1024	SXGA, 1280 x 1024	WSXGA+, 1680 X 1050
Brightness / Contrast Ratio	400 nit / 500:1	300 nit / 800:1	380 nit / 1000:1	300 nit / 2000:1	300 nit / 1000:1
Horz/Vert Viewing Angle	130°/110°	150°/145°	170°/170°	178°/178°	178°/178°
Backlight Life / Typical	50,000 hrs	50,000 hrs	50,000 hrs	50,000 hrs	50,000 hrs

Typical* Power	M1200T	M1500T	M1700T	M1900T	M2200WT
Input Power	25W	25W	30W	35W	60W
AC Input Voltage (blank)	100-240 V AC, 50-60 Hz	100-240 V AC, 50-60 Hz	100-240 V AC, 50-60 Hz	100-240 V AC, 50-60 Hz	100-240 V AC, 50-60 Hz
AC Input Current	0.5 A Maximum	0.5 A Maximum	1.0 A Maximum	1.0 A Maximum	1.0 A Maximum
DC Input Voltage	18-36 V DC (-24)	18-36 V DC (-24)	18-36 V DC (-24)	18-36 V DC (-24)	18-36 V DC (-DC)
DC Input Current	2.0 A Maximum	2.0 A Maximum	2.0 A Maximum	2.0 A Maximum	4.5 A Maximum

** Typical power is measured per model/per processor and without any additional I/O or expansion inputs. Any additional I/O installed during application can increase this value.*

COMMON SPECS

Option codes in (red). See product configurators on pages 18 & 19. For descriptions and usage, download technical datasheet.

I/O

Available I/O	(1) Analog Video Port, (1) Digital Video (DVI) Port, Touchscreen inputs: (1) RS-232, (1) USB

Touchscreen

Technology	5-wire Analog Resistive (T); No Touchscreen option (blank)

Environmental

	Operating	Non-operating
Temperature / Humidity	0°C to 50°C / 20% to 80% RH, noncondensing	-20°C to 60°C / 20% to 80% RH, noncondensing
Shock	15g peak acceleration, 11msec	30g peak acceleration, 11msec
Vibration *(5-2000 Hz)*	.006" peak to peak displacement, 1.0g maximum acceleration	.015" peak to peak displacement, 2.5g maximum acceleration
Altitude [1]	Sea level to 10,000 feet	Sea level to 40,000 feet

[1] *Altitude specification is established by using all internal component specifications.*

Agency Approvals

Front Panel NEMA Rating	NEMA 4/4X/12, IP65
Enclosure Rating [2]	NEMA 1 *(vented, not dust or water proof, for stand-alone VESA mounting - M1500 and M1900 only)* (-EN)
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, RoHS compliant
Safety Agency Approvals *	UL508 Listed, UL 1604 Listed , cUL Listed CSA C22.2, #142, cUL Listed CSA 22.2, #213 *(see notes below on model-specific Hazardous Locations approvals)*

** Class I Division 2, Groups A, B, C, D; Class II, Division 2, Groups F & G; Class III; Temp. Code: T5, when installed on a flat surface of a Type 1, 4, 4X, or 12 enclosure. (Temp. Code: T4 for M2200W only)*

***Enclosed units (M1500 & 1900):** UL1604, cUL CSA C22.2, #213 not applicable to units with -EN option.*

[2] *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 (blank); with No Logo (-NL); Machined 304 Stainless Steel (-SS) *(N/A on M2200W)*; Rackmount Powder Coated Aluminum (-RM) *(M1900 only)* [3]

[3] *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.*

SB & RM Series

"Commercial" Alternatives

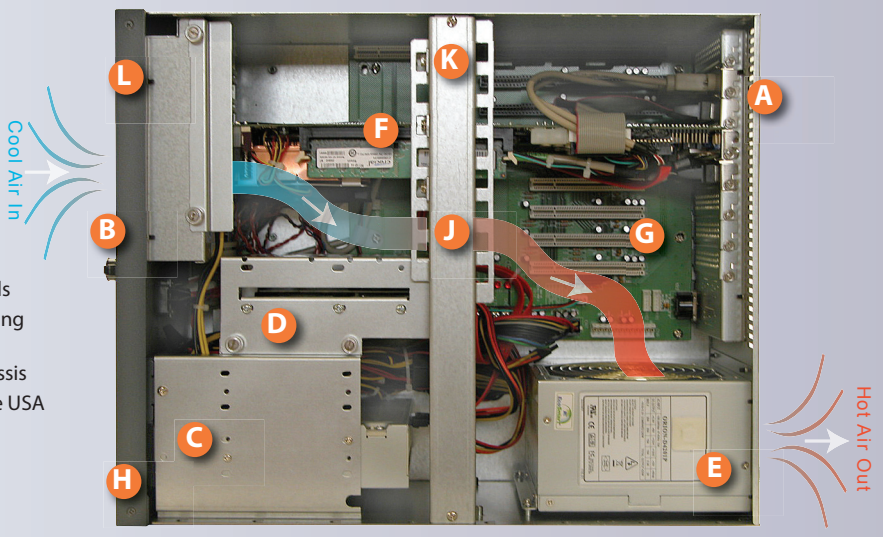
- ***High Performance, Rugged Designs***
- ***Shoebox or Rackmount***
- ***Low-Power, High-Speed Intel Processor***
- ***Removable Storage Media (RAID Option)***

- SB800: 4 available PCI/ISA slots
- RM1400: 10 available PCI/ISA slots
- Intel® High-Performance Processor
- Internal 250GB SATA Hard Drive
  - *Optional 40GB Solid State SATA Drive*
- DRAM up to 4GB
- Extensive I/O Connectivity panel
- Lockable Front Access Door
- DVD-R/W Drive
- Optional Front Access Removable Drives
- Windows XP Professional Operating System
  - *Optional Windows 7 Professional*
- Power Switch with Protective Cover
- Power and HDD LEDs, Recessed Reset Switch

Computer Features

High-Performance / Low-Power Processor
- Intel® Core 2 Duo® E8400 (3.0 GHz, 6 M cache, 1333 MHz bus)

Powder-Coated Aluminum Chassis



A. PCI/ISA expansion slots
B. Lockable front access door
C. DVD-R/W Drive
D. SATA Drive Bays
E. 100-240 V AC Power Supply
F. Expandable DRAM
G. 8-slot or 14-slot Passive Backplanes
H. CE and RoHS Approvals
J. Efficient, Filtered Cooling Chassis Design
K. Rugged Industrial Chassis
L. Made with Pride in the USA

Models At A Glance

SB800

Front Access Door DVD-R/W Drive, Second Hard Drive Bay, Power Switch, Power and HDD LEDs, Recessed Reset Switch, Cooling Fan, and Lockable Stylish Front Door

Mounting Options Horizontal or Vertical with Mounting Brackets

I/O Connectivity
Dual 10/100/1000 Ethernet ports
(4) USB 2.0 ports (2 front/2 rear)
(2) RS-232 Serial ports
Parallel port
PS/2 Port (KB/Mouse splitter incl.)
Analog VGA port

Up to 4 PCI/ISA Expansion Slots Available*. Choose From:
(2) 1/2-length PCI
(1) Full-length PCI
(3) Full-length ISA
** May require repositioning of I/O brackets*

Not shown (above right) with additional installed I/O connectivity (ships with unit) that connects directly to CPU board and utilizes open expansion slots (Audio In/Out, DVI port for dual monitors, (2) USB 2.0 ports).

RM1400

Rack Height 4U

Front Access Door DVD-R/W Drive, Second and Third Removable Hard Drive Bays, (2) USB 2.0 Ports, Floppy Drive, Power Switch, Power and HDD LEDs, Recessed Reset Switch, Cooling Fan, and Lockable Stylish Front Door

I/O Connectivity
Dual 10/100/1000 Ethernet ports
(4) USB 2.0 ports (2 front/2 rear)
(2) RS-232 Serial ports
Parallel port
PS/2 Port (KB/Mouse splitter incl.)
Analog VGA port

Up to 10 PCI/ISA Expansion Slots Available*. Choose From:
(3) 1/2-length PCI
(2) 3/4-length PCI
(2) Full-length PCI
(3) Full-length ISA
(1) 3/4-length ISA
** May require repositioning of I/O brackets*

Shown (above right) with additional installed I/O connectivity (ships with unit) that connects directly to CPU board and utilizes open expansion slots (Audio In/Out, DVI port for dual monitors, 2 USB 2.0 ports).

Technical Specifications

SB800 & RM1400 Series

Physical	SB800	RM1400
Overall *H x W x D*	6.77" x 12.99" x 16.64" (172.0mm x 330.0mm x 422.0mm)	12.80" x 15.80" x 2.95" (325.1mm x 401.3mm x 74.9mm)
Weight	31.3 lbs (14.19kg)	37.8 lbs (17.14kg)
Shipping Weight	35.3 lbs (16.01kg)	42.8 lbs (19.41kg)
Memory and Storage (See I/O on previous page)		
DRAM	2GB (-2GB) *(240-pin DDR2 SO-DIMM, non-ECC, unbuffered, 800 MHz)*; 4GB Max (-4GB)	2GB (-2GB) *(200-pin DDR2 SO-DIMM, non-ECC, unbuffered, 667 MHz)*; 4GB Max (-4GB)
Internal Hard Drive	250GB SATA Conventional HD (-HD); 40GB SATA Solid State Drive (-40SS) option	250GB SATA Conventional HD (-HD); 40GB SATA Solid State Drive (-40SS) option
Front Access Bay	DVD-R/W (-DVD)	DVD-R/W (-DVD); Floppy Drive (-FD) optional
Second Front Access Bay	Removable 250GB SATA Conventional Hard Drive (-RHD) option	Removable 250GB SATA Conventional Hard Drive (-RHD) option
Third Front Access Bay	N/A	Removable 250GB SATA Conventional Hard Drive (-RHD) option; RAID Level 1 Mirroring (-RAID)

COMMON SPECS

Option codes in (red). See product configurators on pages 18 & 19. For descriptions and usage, download technical datasheet.

Processor	Core 2 Duo E8400
Type & Processor	Intel Core 2 Duo E8400 (-E8400)
Core Speed	3.0 GHz
L2 Cache	6MB
Front Side Bus	1333 MHz
Chipset	Intel Q35 + ICH9DO
Ethernet Controller	Intel 10/100/1000 (2 ports)
Operating System	
Standard OS	Windows XP Professional (-XP); Optional Windows 7 Professional 32-bit (-W7) or No OS installed (-NOS)
Electrical	
AC Input Voltage/Max Current	100-240 VAC, 47-63 Hz, 8.0 A Maximum
Input Power	400 W

Environmental	Operating	Non-operating
Temperature / Humidity	0°C to 50°C / 20% to 80% RH, noncondensing	-20°C to 60°C / 20% to 80% RH, noncondensing
Shock [1]	15g peak acceleration, 11msec	30g peak acceleration, 11msec
Vibration *(5-2000 Hz)* [1]	.006" peak to peak displacement, 1.0g maximum acceleration	.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.

Agency Approvals	
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, RoHS compliant

Industrial PC and Flat Panel Monitor Accessories

DVD & Hard Drives

ePC-HD	250GB (min) SATA Hard drive and carrier	ePC/ePC-Plus/nPC
ePC-40SS	40GB SATA Solid State drive and carrier	ePC/ePC-Plus/nPC
ePC-80SS	80GB SATA Solid State drive and carrier	ePC/ePC-Plus/nPC
ePC-160SS	160GB SATA Solid State drive and carrier	ePC/ePC-Plus/nPC
ePC-DVD	SATA DVD-R/W Optical drive and carrier	ePC-Plus/nPC200
ePC-USB-DVD	External USB DVD-R/W Optical drive (includes holster with 75mm and 100mm VESA mount pattern for mounting to the rear)	ePC-Series
RM-RHD	Removable Hard Drive carrier only (does not include a hard drive or receptacle to mount in the RM unit). Must have ordered an RHD option on the RM unit when initially ordered.	RM1400
RM-250RHD	Removable Hard Drive carrier with 250GB SATA Hard Drive installed (does not include a receptacle to mount in the RM unit). Must have ordered an RHD option on the RM unit when initially ordered.	RM1400
ePC-HD-EN	250GB (min) SATA Hard drive and carrier	Enclosed ePC-Plus
ePC-40SS-EN	40GB SATA Solid State drive and carrier	Enclosed ePC-Plus
ePC-80SS-EN	80GB SATA Solid State drive and carrier	Enclosed ePC-Plus
ePC-160SS-EN	160GB SATA Solid State drive and carrier	Enclosed ePC-Plus
ePC-DVD-EN	SATA DVD-R/W Optical Drive and carrier	Enclosed ePC-Plus

Connectors and Wiring

PWR-AC-EN	IEC connector for field wiring longer (than 2.5 m) AC power cables on Enclosed units only. Cable not provided. Not for use on standard panel mount versions.	Enclosed Units
CBL-USB2M-WP	Waterproof Panel Mount USB connector and cover with 2m cable. Not intended for touchscreen connections to a monitor, to be used for front access USB connections from the host computer (requires separate mounting hole)	ePC/ePC-Plus/nPC
PWR-AC	Power Wiring Connector for AC powered units (incl. terminal cover)	AC-Powered Units
PWR-DC	Power Wiring Connector for DC powered units (incl. terminal cover)	DC-Powered Units
CBL-PWR-AC	6' AC wiring cable with standard 3-prong US end on one side and Phoenix Power Wiring connector with cover on other end. ***NOTE: NOT allowed for use in Hazardous Conditions.***	Non-enclosed M-Series/ePC-Series/ ePC-Plus/nPC

Video & Touchscreen Cables

CBL-10-VGA	15-Pin analog VGA cable, 10' length	M-Series
CBL-25-VGA	15-Pin analog VGA cable, 25' length	M-Series
CBL-50-VGA	15-Pin analog VGA cable, 50' length	M-Series
CBL-10-RS232	Serial RS-232 touch screen cable, 10' length	M-Series
CBL-25-RS232	Serial RS-232 touch screen cable, 25' length	M-Series
CBL-50-RS232	Serial RS-232 touch screen cable, 50' length	M-Series
CBL-10-USB	USB touch screen cable, 10' length	M-Series
CBL-15-USB	USB touch screen cable, 15' length	M-Series
CBL-2M-DVI	DVI (type D) video cable, 2 m length	M-Series
CBL-3M-DVI	DVI (type D) video cable, 3 m length	M-Series

Adapter Plates, Mounts, and Stands

RM-WMB	Wall mount kit for mounting to SB600, SB800 or RM1400 to a shelf or panel	SB/RM
MTG-RM-1500	Rackmount adapter plate	M1500/ePC1500/ePC1550
MTG-RM-1700	Rackmount adapter plate	M1700/ePC1700/ePC1750
MTG-CAP-5015	Cutout adapter plate for mounting an M1500, ePC1500 or ePC1550 in a Xycom 5015T or 5015T/R2 cutout. Requires drilling 16 mounting holes around the present cutout.	M1500/ePC1500/ePC1550
MTG-CAP-5017	Cutout adapter plate for mounting an M1700, ePC1700 or ePC1750 in a Xycom 5017 cutout. Requires drilling 16 mounting holes around the present cutout.	M1700/ePC1700/ePC1750
MISC-CLIP	Mounting clip kit, includes 18 clips and screws	Panel Mount units
MTG-DEMOSTAND	Stand for demonstration and development purposes only. Includes 75mm and 100mm VESA patterns. ***NOTE: NOT intended for use in production applications.***	All Units with VESA Mount Pattern
MTG-STAND	Stand with VESA Mounts	Enclosed Units
MTG-ARM	Mountable swing arm with VESA mounts, can be table or wall mounted	Enclosed Units

OptiMate Series

2YR WARRANTY Covers Parts & Labor

Character-based Operator Interfaces

- Broad range of input and display capabilities
- Sixteen operator interface terminals available
- Communications Module (OM9001) allows connection of up to 31 OptiMate Panels together
- Cost-effective Control & I/O solution
- Downloadable Windows-based, Easy-to-use Configuration Software (OM-WINEDIT)
- Durable construction
- Compatible with PCs that have RS-232 or RS-422 port
- UL/cUL Approved
- Compatible with most major brand PLCs

✦ ***Compatible with major PLC drivers***
✦ ***Intelligent Peripherals for Control & I/O***
✦ ***Low-Cost, High Performance***

Optimate/PLC Compatibility Chart

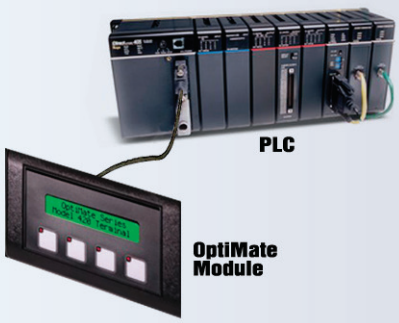
Use the PLC Compatibility Chart below to determine the letter to append to the model number that would be ordered.
Examples: *To purchase an OM640 for use with an Allen Bradley (AB) PLC, then the model number to order would be OM640G. For use with a Modbus PLC then it would be OM640H. A "--" indicates that the model is incompatible with the corresponding PLC.*

PLC Brand	400 Series	600 Series	1000 Series	OM9001
Allen Bradley (AB) DF1 Serial	G	G	A	A
AutomationDirect	G	G	A	A
Entertron	J	J	B	--
GE Fanuc	--	--	A	A
IDEC	--	--	B	--
Keyence	H	H	--	--
Mitsubishi	L	L	B	--
Modbus Serial	H	H	A	A
Omron	--	--	A	A
Toshiba	--	--	A	A
OptiMate Hex	G, J, H, L	G, J, H, L	A, B	--

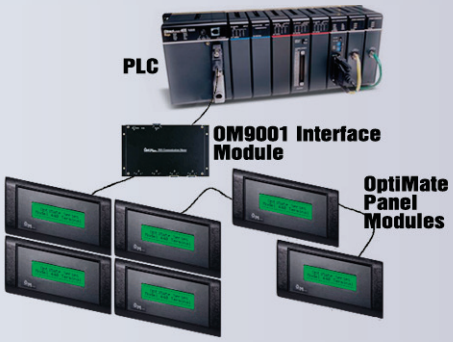
Standard configuration - appended letter not required on these model numbers.

OptiMate Panel Configuration Options

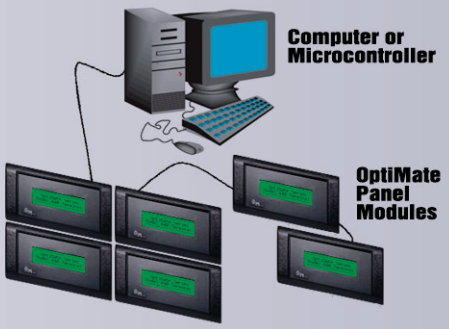
PLC Stand-Alone



PLC Multi Module



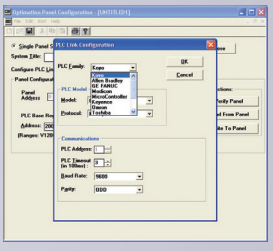
Microprocessor-based Systems



Easy-to-Use Software for OptiMate Panel Configuration

OM-WINEDIT is a graphical, user-friendly software program that runs on any Windows-compatible computer. It is available to configure any OptiMate panel system, or define all system parameters.

OM-WINEDIT can be downloaded from the Nematron.com web site **at no charge.** It can also be purchased on CD-ROM and comes with OM-ACBL-1 and OM-CCBL cables to connect the PC and operator panels.



OM-WINEDIT is designed specifically for custom configuration of OptiMate modules, allowing you maximum flexibility in customizing the way your panels will operate.

Technical Specifications

OptiMate Series





400 Series

	OM406	OM413	OM414	OM420	OM440
Description	Indicator/Pushbutton Panel Six LED light bars and four pushbutton pads	Setpoint/Display Panel One 4-digit numeric display and six mapped data fields	Setpoint/Display Panel One 8-digit numeric display and six mapped data fields	2-line Operator Panel 2x20 char. LCD with 160-msg capacity and four pushbuttons	4-line Operator Panel 4x20 char. LCD with 160-message capacity




600 Series

	OM609 Combo Panel	OM613 Operator Panel	OM620 Operator Panel	OM640 Operator Panel
Description	Six LED light bars and nine pushbutton pads	4-digit numeric display, four mapped fields, two LED light bars, four pushbutton pads	2x20 char. LCD with 160-message capacity, configurable menu tree, five pushbutton pads	4x20 char. LCD with 160-message capacity, three LED light bars, five pushbutton pads



1000 Series

	OM1124 Annunciator Panel	OM1212 Button/Lamp Panel	OM1224 Pushbutton Panel
Description	A high-intensity LED panel with 24 LED light bars	12 LED light bars and 12 pushbutton pads	24 pushbutton pads ready for custom labels



	OM1312 Setpoint Panel	OM1500 Operator Panel	OM1510 Operator Panel
	Three 4-digit numeric displays and 12 mapped data fields	2x20 char. LCD with 160-msg capacity three LED light bars, five pushbuttons, and full keypad	All the features of the OM1500, plus a configurable menu tree

OM9001

OM9001 Communications Master

Description

The OM9001 Communications Master provides an intelligent interface between your PLC and up to 31 connected OptiMate panels (600 Series or 1000 Series). The OM9001 communicates serially to the PLC, transferring register data in both directions, and transparently manages operations amongst the OptiMate panels. The OM9001 can be configured via OM-WINEDIT Configuration Editor to use any of several industry-standard PLC protocols. Baud rate, parity and other protocol specifics are interactively selectable to enable communications. Once configured, the OM9001 will continuously transfer data between all modules and the PLC to read and write the appropriate data registers. The OM9001 and the OptiMate panels take care of the rest.

OptiMate Product Accessories

Configuration Cables

OM-ACBL-1	Connects between 600 or 1000 series panels and a PC (Also used with A/B PLCs)
OM-CCBL	Connects between 400 series panels and PC

PLC Communication Cables

Allen Bradley PLCs

OM-ACBL-1	Connects any 600 or 1000 series OptiMate panel to an Allen Bradley SLC 5/03 or 5/04 PLC
OM-ACBL-2	Connects any 600 or 1000 series OptiMate panel to an Allen Bradley Micrologix PLC
OM-ACBL-3	Connects any 400 series OptiMate panel to an Allen Bradley SLC 5/03 or 5/04
OM-ACBL-4	Connects any 400 series OptiMate panel to an Allen Bradley Micrologix PLC

GE Fanuc PLCs

OM-GCBL-1	Connects any 1000 series OptiMate panel to GE Series 90 Micro or 90/30 PLC

Keyence PLCs

OM-KCBL-1	OptiMate 400 series panel to Keyence CPU
OM-KCBL	OptiMate 600 series panel to Keyence CPU

Koyo (Automationdirect.com) PLCs

OM-2CBL	OptiMate 600 or 1000 series to DL105, DL205, D3-350 or D4-450 CPU. 15 pin 'D' shell to RJ12 jack
OM-2CBL-1	OptiMate 600 or 1000 series to DL250 bottom port. 15 pin 'D' shell to 15 pin SVGA.
OM-2CBL-2	OptiMate 400 series to DL05, DL105, DL205, DL350 or DL450 CPU. RJ12 to RJ12.
OM-3CBL	OptiMate 600 or 1000 series to DL340 CPU. 15 pin 'D' shell to RJ11
OM-3CBL-1	OptiMate 400 series to D3-340 CPU. RJ12 to RJ11
OM-4CBL-1	Connects 600 or 1000 series panel to DL405 CPU. 15 pin 'D' shell to 15 pin 'D' shell
OM-4CBL-2	Connects 600 or 1000 series panel to DL405 or DL350 CPU. 15 pin 'D' shell to 25 pin 'D' shell
OM-4CBL-3	Connects 400 series panel to DL405 CPU. RJ12 to 15 pin 'D' shell

Modicon PLCs

OM-MCBL-1	OptiMate 600 or 1000 series to Modicon RJ45
OM-MCBL-2	OptiMate 400 series to Modicon RJ45

Power Supplies

OL-PS1	Wall plug power supply for 600 series, 1000 series panels. 24VDC (unregulated) @ 1A output
OM-PS400	Wall plug power supply for 400 series panels. 5V @250mA with center negative. Required for configuration and for connection to PLCs that do not have a 5VDC connection on their communication port

Light Bar Kits

OM-GREEN	4-Pack of Green Light Bars
OM-RED	4-Pack of Red Light Bars
OM-YELLOW	4-Pack of Yellow Light Bars

Connector Kits

OM-CMCON-1	Package of 4 ribbon cable connectors OM9001 to OptiMate connection
OM-CMCON-2	Package of 4 solder type 15 pin (male) 'D" shell connectors for OM9001 to OptiMate connection
OM-CMCON-3	Package of 2, 15 pin 'D' shell to 4 pin terminal block converters for 600 or 1000 series RS422 connection
OM-PSCON	Package of 4 terminal plugs for power connection to 600 or 1000 series panels

Configuration Software

OM-WINEDIT	OptiMate panel configuration software on CD-ROM. Comes with OM-ACBL-1 and OM-CCBL cables to connect the PC and operator panels. Software can be downloaded separately at no charge from Nematron.com

PowerView Series

2YR WARRANTY Covers Parts & Labor

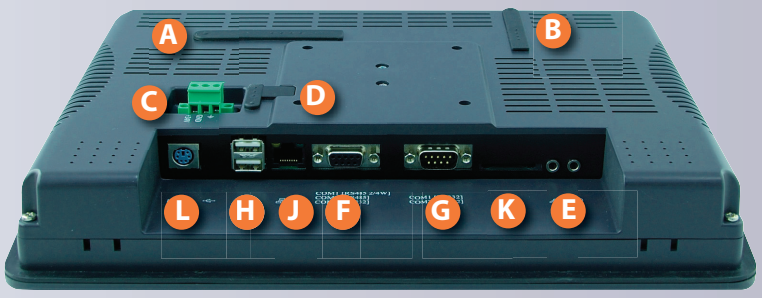
4.3" to 15.0" Color TFT Graphical Operator Interfaces

- Resistive Touchscreens
- 400 MHz RISC and 500 MHz CISC Processors
- 7.0" and 10.0" Widescreen Displays Available
- Up to 256MB Storage and DRAM
- Powerful EasyBuilder 8000 Configuration software *(included on CD with every unit)*
- Serial, USB and Ethernet Expansion Capabilities
- Durable construction with NEMA 4/IP65 rating
- Wide Range of PLC Driver Support
- Nominal 2.17" Maximum Mounting Depth

Bright Displays with LED-backlighting
Ethernet Connectivity (8000 Series)
Wide-Range PLC Driver Support

Computer Features

A. IDE Interface (DOM slot)
B. CompactFlash Slot
C. Power connector
D. DIP SW and Reset Button
E. Mic In/Line Out
F. Com1 RS-485*
Com3 RS-485*
Com3 RS-232*
G. Com1 RS-232*
Com2 RS-232*
H. USB Host x 3
J. Ethernet Port 10/100 Base T
K. SD Card slot
L. PS/2 Port



** See Adapter Cables and HMI Interconnect Cables diagram on next page to select the appropriate cables to support your unit and application.*

Communication Driver Support

EasyBuilder 8000 comes equipped with support for many protocols. Highlights of more popular drivers are shown here. For a more complete list, consult the PLC Connect Guide included in software *(Over 175+ Drivers on 79 different brands of PLCs)*.

- AB Micrologix (DF1 Protocol)
- AB SLC500 (DF1, DH485 [1])
- AB PLC5 (DF1 Protocol)
- AB CompactLogix, FlexLogix (AB Logix DF1)
- AB Control/Compact Ethernet IP Native Tags
- AutomationDirect (Koyo)
- Barcode Reader USB/Serial
- GE Fanuc Micro, 90-30 Series (GE SNP-X Protocol)
- Keyence
- Mitsubishi
- Modbus Serial
- OMRON
- Panasonic
- QJ71, Communication Module (QJ71), 232/485 BD
- Siemens S7 200/300/400 (serial)
- Siemens S7 200/300/400 (Ethernet)
- TCP/IP
- Telemechanique Twido (Modbus RTU)
- Yaskawa
- Yokogawa FA-M3 Series

[1] AB DH485 only available with use of PowerView 8000 High Performance Units (500 MHz processor).

EasyBuilder 8000[2] Development Software

Enhanced Application Development Suite

EasyBuilder 8000 (NS-EB8000)[2] comes with a set of enhanced tools for reducing the time to develop projects.

- Pop-up Windows
- Alarm & Event Management
- Recipe Management
- Data Logging/Data Sampling
- Object Libraries
  - Bar Graphs
  - Numerical Input
- Object Protection
- Support for BMP, JPG and GIF
- Text Display
  - Multi-language
  - Windows® True Type Font
- Multi-level Password Security
- Online & Offline Simulator
- Macro Language Programming
- Communicate with mutliple different brand PLCs on one HMI

Importing/Converting Projects from PV-500 Series

EasyBuilder 8000 provides the ability to import and/or convert projects created for the older PowerView 500 Series models into fully-functional projects that can be edited in EasyBuilder 8000 and utilized on the PV-8000 Series.

Offline Simulation

Simulate the operation of a PV-8000 directly on the PC without actually having a PV-8000 and a PLC.

[2] EasyBuilder 8000 software may also be ordered on CD or downloaded from Nematron.com.

Technical Specifications

PowerView 6000 & 8000 Series






Physical	PV-6050WV2 / PV-8050WV2	PV-6070WHV2 / PV-8070WHV2	PV-6100WV2 / PV-8100WV2	PV-8104XHV2	PV-8121XV2	PV-8150XV2
Overall Dimensions *H x W x D*	5.03" x 4.02" x 1.5" (128 x 102 x 38mm)	7.87" x 5.74" x 1.67" (200 x 146 x 42.5mm)	10.67" x 8.35" x 1.97" (271 x 212 x 50mm)	11.26" x 8.35" x 1.97" (286 x 212 x 50mm)	12.68" x 9.57" x 2.00" (322 x 243 x 51mm)	14.41" x 11.54" x 2.17" (366 x 293 x 55mm)
Panel Mounting Depth	1.42" (36mm)	1.67" (42.5mm)	1.97" (50mm)	1.97" (50mm)	2.00" (51mm)	2.17" (55mm)
Cutout Dimensions *H x W*	4.685" x 3.661" (119 x 93mm)	7.5" x 5.4" (192 x 138mm)	10.2" x 7.91" (259 x 201mm)	10.2" x 7.91" (259 x 201 mm)	12.0" x 9.09" (305 x 231 mm)	13.86" x 10.98" (352 x 279 mm)
Weight	0.7 lbs (0.3 kg)	1.87 lbs (0.85 kg)	3.1 lbs (1.4 kg)	3.5 lbs (1.6 kg)	4.6 lbs (2.1 kg)	6.4 lbs (2.9 kg)
Chassis Construction	Plastic	Plastic	Plastic	Plastic	Plastic	Aluminum
Display						
Display Size	4.3"	7.0" Widescreen	10.0" Widescreen	10.4"	12.1"	15.0"
Native Resolution	480 x 272	800 x 480	800 x 480	800 x 600	800 x 600	1024 x 768
Contrast Ratio	600:1	500:1	500:1	400:1	500:1	550:1
Backlight	LED	LED	LED	LED	CCFL x 2	CCFL x 2
Electrical						
Input Power/Fuse Rating	24±20% VDC / 1.25 A	24±20% VDC / 1.25 A	24±20% VDC / 1.25 A	24±10% VDC / 1.25 A	24±10% VDC / 1.25 A	24±10% VDC / 1.6 A
Processor						
Technology	32bit RISC CPU 400 MHz	32bit RISC CPU 400 MHz	32bit RISC CPU 400 MHz	32bit CISC CPU 500 MHz	32bit CISC CPU 500 MHz	32bit CISC CPU 500 MHz
Memory & Storage						
DRAM	128MB	128MB	128MB	256MB	256MB	256MB
Program Storage	128MB	64MB	64MB	256MB	256MB	256MB
Agency Approvals						
UL/cUL/CE	UL/cUL/CE *(PV-8050 pending)*	UL/cUL *(8070 only)* CE *(Both)*	UL/cUL *(8100 only)* CE *(Both)*	UL/cUL/CE	UL/cUL/CE	UL/cUL/CE
I/O Connectivity						
Ethernet	One (10/100) *PV-8050 only*	One (10/100) *PV-8070WHV2 only*	One (10/100) *PV-8100WHV2 only*	One (10/100)	One (10/100)	One (10/100)
USB	1 USB Client port	1 USB Host port & 1 Client port	1 USB Host port & 1 Client port	2 USB Host Ports	2 USB Host Ports	2 USB Host Ports
COM1 [1]	RS-232/RS-485 (2W/4W)	RS-232/RS-485 (2W/4W)	RS-232/RS-485 (2W/4W)	RS-232/RS-485 (2W/4W)	RS-232/RS-485 (2W/4W)	RS-232/RS-485 (2W/4W)
COM2 [1]	N/A	RS232	RS232	RS232	RS232	RS232
COM3 [1]	N/A	RS-232/RS-485 (2W)	RS-232/RS-485 (2W)	RS-232/RS-485 (2W)	RS-232/RS-485 (2W)	RS-232/RS-485 (2W)

[1] The use of either CBL-PV8COM1 or CBL-PV8COM3 adapter cable **is required** to connect to both ports simultaneously or to use the pre-built Nematron HMI Interconnect Cables (see diagram below). Direct connection to a single port using customer created cables is possible (consult the PLC connect guide in the documentation included with the software). The use of CBL-PV505-PLC232 **is required** to connect via RS-232 to COM1 on the PV6050/8050 units only.

COMMON SPECS

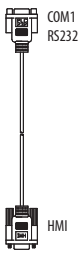
Touchscreen		
Technology	4-wire Analog Resistive	
Environmental	**Operating**	**Non-operating**
Temperature / Humidity	0~50°C / 10-90% RH (non–condensing)	-20~60°C / 10-90% RH (non–condensing)

Adapter Cables and HMI Interconnect Cables

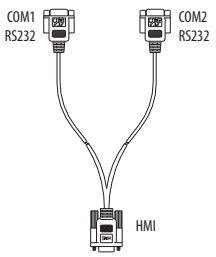
Select an HMI Interconnect Cable from chart B or construct a cable using the information provided with the software. If choosing one of the HMI Interconnect Cables from chart B, it must be used in conjunction with the applicable Adapter Cable in chart A below.

Use the Cross Reference Chart (B) below to select the applicable HMI Interconnect Cable to use with your brand PLC.

A. Adapter Cables *Required when connecting a Nematron HMI Interconnect Cable (see chart on right for specific cables).*

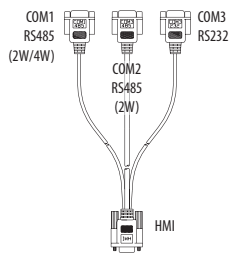


CBL-PV505-PLC232 Adapter cable to connect Nematron HMI Interconnect cables to PV-6050 and PV-8050 only



CBL-PV8COM1 Adapter cable to break out ports for COM1-232 and COM2-232. Allows Nematron HMI cables to be connected to PV8000 units

CBL-PV8COM1-8 Adapter cable to break out ports for COM1-232 and COM2-232. Allows Nematron HMI cables to be connected to PV8000 units. **NOTE:** Only for use when replacing a PV-500 series unit with a PV-6000/8000 series unit and a previously installed Nematron HMI Interconnect Cable is present



CBL-PV8COM3 Adapter cable to breakout COM1-485, COM3-485, and COM3-232. Allows Nematron HMI Cables to be connected to PV8000 units

CBL-PV8COM3-8 Adapter cable to breakout COM1-485, COM3-485, and COM3-232. Allows Nematron HMI Cables to be connected to PV8000 units. **NOTE:** Only for use when replacing a PV-500 series unit with a PV8000 series unit and a previously installed Nematron HMI Interconnect Cable is present

B. HMI Interconnect Cable - Cross-Reference Chart

Nematron HMI Cable Cross-Reference by Controller. (Cables are 6-foot length unless otherwise noted.)

Mfg	Model	Type/Controller Connector	PV-6000/8000 Series [2] [3]
A-B/Rockwell	MicroLogix 1000/1200/1500	RS-232 (DIN 8-pin)	CBL-PV3-8
A-B/Rockwell	MicroLogix 1500	RS-232 (DE9S)	CBL-PV4-8
A-B/Rockwell	SLC 5/01, 5/02, 5/03, 5/04, 5/05, A-B Communications Interface Module (DF1)	RS-232 (DB9)	CBL-PV4-8
A-B/Rockwell	SLC500 (DH485)	RJ45	CBL-PV12
A-B/Rockwell	A-B PLC5 (DF1)	RS-232 (DB25)	CBL-PV13-8
GE	Series 90	RS-485 (DA15P)	CBL-PV5
GE	VersaMax	RS-485 (DA15P)	CBL-PV5
Koyo	DL05/DL105/DL205/DL305/DL350/DL405 Port 2	RS-232 (RJ12)	CBL-PV10-8
Koyo	DL205/DL250 CPU Port 2 (cannot be used with PV-570L)	RS-232 (15P SVGA)	CBL-PV6-8
Koyo	DL305/ DL340 (cannot be used with PV-570L)	RS-232 (DB25P)	CBL-PV7-8
Koyo	DL405 port 0	RS-232 (DA15P)	CBL-PV8-8
Koyo	DL405 port 1	RS-232 (DB25P)	CBL-PV9-8
Koyo	DL405 Port 2	RS-232 (RJ12)	CBL-PV10-8
Mitsubishi	A Series	RS-232 (DE9P)	CBL-PV2-8
Modicon	Micro, Momentum	RS-232 (RJ-45)	CBL-PV11-8
Siemens	Simatic TI505	RS-232 (DE9S)	CBL-PV14-8
Siemens S7	Siemens S7-200	RS-485 (DB9)	CBL-PV15

[2] When installing a PV-6000 or 8000 series unit in place of a PV-500 series with a previous version of a Nematron RS-232 HMI Interconnect Cables (not -8 suffix), the use of CBL-PV8COM1-8 or CBL-PV8COM3-8 is required.

[3] The use of either CBL-PV8COM1 or CBL-PV8COM3 adapter cable **is required** to connect to both ports simultaneously or to use the pre-built Nematron HMI Interconnect Cables (see diagram below). Direct connection to a single port using customer created cables is possible (consult the PLC connect guide in the documentation included with the software). The use of CBL-PV505-PLC232 **is required** to connect via RS-232 to COM1 on the PV6050/8050 units only.

Industrial PC and Monitor Configurators

ePC15T Lite "Fanless" Industrial PC

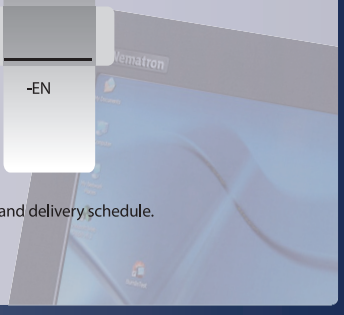
Model Line	Display/Input	CPU	DRAM	Drive 1	OS	Front Panel	Enclosure [1]
ePC	15T	N270	2GB	40SS	-XP -W7	blank -NL	blank -EN

[1] NEMA 1 only, not recommended for environments with high levels of moisture and/or particulate matter.

ePC-Series "Fanless" Industrial PCs with LCD Displays

Model Line	Display Size	Inputs	CPU	DRAM	Hard Drive	OS	Power Supply	Front Panel [1]	Enclosure [2 4]
ePC	1200 1500 [2] 1700 1900 [2]	T blank	N270	2GB	-40SS -80SS -160SS blank	-XP -W7 -NOS	blank -DC [3]	blank -NL -SS -RM [1]	-EN

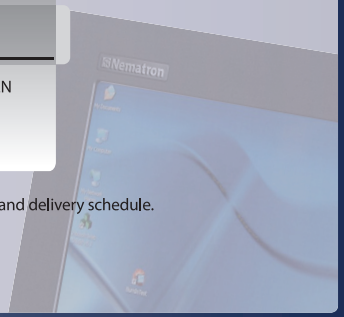
[1] Rackmount front panel is not NEMA 4/4X/12 and the unit is required to be installed on a rack in a Type 1 enclosure.
[2] Enclosure (-EN) option only available on the 1500 and 1900 models, with standard (blank) or No Logo (-NL) front panels only. Check factory for availability and delivery schedule.
[3] 24VDC (-DC) not available with Enclosure (-EN) option.
[4] NEMA 1 only, not recommended for environments with high levels of moisture and/or particulate matter, and not approved for Hazardous Locations.



ePC-Series Industrial PCs with TFT LCD Displays

Model Line	Display Size	Inputs	CPU	DRAM	Hard Drive	OS	Power Supply	Front Panel [2]	Enclosure [2 4]
ePC	1200 1500 [2] 1700 1900 [2]	T blank	CM440 T2500	2GB	-40SS -80SS -160SS blank	-XP -W7 -NOS	blank -DC [3]	blank -NL -SS -RM [1]	-EN

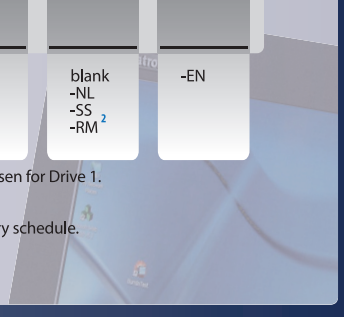
[1] Rackmount front panel is not NEMA 4/4X/12 and the unit is required to be installed on a rack in a Type 1 enclosure.
[2] Enclosure (-EN) option only available on the 1500 and 1900 models, with standard (blank) or No Logo (-NL) front panels only. Check factory for availability and delivery schedule.
[3] 24VDC (-DC) not available with Enclosure (-EN) option.
[4] NEMA 1 only, not recommended for environments with high levels of moisture and/or particulate matter, and not approved for Hazardous Locations.



ePC-Plus Series Industrial PCs with PCI Expansion

Model Line	Display Size	Inputs	CPU	DRAM	Drive 1	Drive 2 [1]	Optical Drive	OS	Power Supply	Front Panel [2]	Enclosure [3 5]
ePC	1550 [3] 1750 1950	T blank	MC550 T7500	-2GB -4GB	-40SS -80SS -160SS -HD	-40SS -80SS -160SS -HD -RAID	-DVD blank	-XP -W7 -NOS	blank -DC [4]	blank -NL -SS -RM [2]	-EN

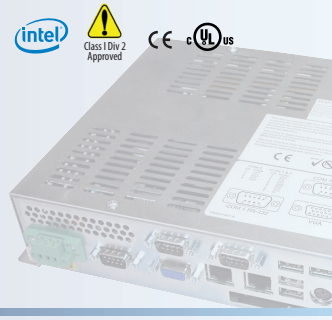
[1] If RAID Level 1 (mirroring) is desired, select "-RAID" option for the second drive choice. The unit will be configured with two mirrored drives of the type chosen for Drive 1. This option is only available with Windows XP.
[2] Rackmount front panel is not NEMA 4/4X/12 and the unit is required to be installed on a rack in a Type 1 enclosure.
[3] Enclosure (-EN) option only available on the 1550 model, with standard (blank) or No Logo (-NL) front panels only. Check factory for availability and delivery schedule.
[4] 24VDC (-DC) not available with Enclosure (-EN) option.
[5] NEMA 1 only, not recommended for environments with high levels of moisture and/or particulate matter, and not approved for Hazardous Locations.



Download the product datasheet for full descriptions of each option. Consult your Nematron representative or factory for assistance with configuring and placing an order.

nPC100 "Node" Industrial PC

Model Line	CPU	DRAM	Hard Drive	OS	Power Supply
nPC100 -		- 2GB			
	CM440 N270 T2500		-40SS -80SS -160SS blank	-XP -W7 -NOS	blank -DC



nPC200 "Node" Industrial PC with PCI Expansion

Model Line	CPU	DRAM	Drive 1	Drive 2 [1]	Optical Drive	OS	Power Supply
nPC200 -							
	MC550 T7500	-2GB -4GB	-40SS -80SS -160SS -HD	-40SS -80SS -160SS -HD -RAID	-DVD blank	-XP -W7 -NOS	blank -DC

[1] If RAID Level 1 (mirroring) is desired, select "-RAID" option for the second drive choice. The unit will be configured with two mirrored drives of the type chosen for Drive 1. This option is only available with Windows XP.

M-Series Industrial Flat Panel Monitors

Model Line	Display Size	Inputs	Power Supply	Front Panel [1]	Enclosure [4] [5]
M			-		
	1200 1500 [4] 1700 1900 [4] 2200W	T blank	blank -24 [2] -DC [3]	blank -NL -SS -RM [1]	-EN

[1] 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. M1900 only.
[2] The -24 option is not available on the M2200W or -EN option. Enclosed units ship with AC power cord.
[3] Isolated 24 VDC (-DC option) available on M2200W only.
[4] Enclosure (-EN) option only available on the 1500 and 1900 models with standard (blank) or No Logo (-NL) front panels only. Check factory for availability and delivery schedule.
[5] NEMA 1 only, not recommended for environments with high levels of moisture and/or particulate matter, and not approved for Hazardous Locations.

SB800 "Shoebox" Industrial PC without Display (8-Slot)

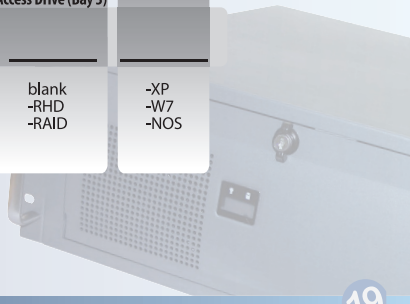
Model Line	CPU	DRAM	1st Internal Hard Drive	2nd Internal Hard Drive [2]	Removable Media	Second Front Access Bay	OS
SB800 -	E8400				- DVD		
		-2GB -4GB	-HD -40SS blank [1]	blank -HD -40SS		blank -RHD	-XP -W7 -NOS

[1] When ordering the no internal hard drive option, a removable hard drive option must be ordered.
[2] Second Internal Hard Drive cannot be installed if First Internal Hard Drive is not installed.

RM1400 Rackmount Industrial PC without Display (14-Slot)

Model Line	CPU	DRAM	Internal Hard Drive	Floppy Drive	Removable Media (Drive Bay 1)	Second Front Access Drive (Bay 2) [2]	Third Front Access Drive (Bay 3)	OS
RM1400 -	E8400				- DVD			
		-2GB -4GB	-HD -40SS blank [1]	blank -FD		blank -RHD	blank -RHD -RAID	-XP -W7 -NOS

[1] When ordering the no internal hard drive option, a removable hard drive option must be ordered.
[2] Drive Bay 2 must be utilized before Drive Bay 3 can be chosen.



Nematron

Tackle Your Industrial PC Needs with A Proven Brand.

Nematron has been ***"Pioneering Innovative Computer and Visualization Solutions"*** for the manufacturing and process industries for nearly 30 years – and this tradition of excellence continues with our state-of-the-art Industrial PC, Monitor, and HMI product offerings. Nematron has addressed many of your industrial PC and monitor concerns long before they present themselves in your application.

Long Term Support Confidence

We adhere to the recommended Intel® Embedded Roadmap with our Industrial PC designs. Buy with confidence as this allows us to provide years of service to current and legacy products. Our repair services are handled in our Ann Arbor, Michigan USA facility.

Made in the USA

Nematron Industrial PCs & Monitors are manufactured with pride in the U.S.A.

Contact your Nematron Representative today:

Nematron Corporation
5840 Interface Drive, Suite 100
Ann Arbor, MI 48103 USA
Toll free: 1-800-NEMATRON (636-2876)
Tel: 1.734.214.2000
Fax: 1.734.994.8074
http://www.nematron.com
Email: sales@nematron.com

***1-800-NEMATRON** (636-2876)*
Email: sales@nematron.com

DOC-MKT-002