Nematron

DS Rackmount Node, Rev B2

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

Rackmount & Shoebox PCs

Now offering Core 2 Duo & Quad Processors!

8-Slot and 14-Slot High Performance Industrial PCs without Displays







SB800 Shoebox

The SB800 is an 8-Slot Shoebox Industrial PC with high-performance Intel® processor options including Core 2 Duo and Quad options. The SB800 compact profile offers a wide range of connectivity and expansion options.

SB800 Standard Features

- High Performance Processor options to choose from:
 - Intel® Core® 2 Duo™ E8400 (3.0 GHz, 6 M cache, 1333 MHz bus)
 - Intel® Core 2 Quad Q9400 (2.66 GHz, 6 M cache, 1333 MHz bus)
- Extensive I/O Connectivity
 - Dual Gigabit 10/100/1000 Ethernet ports
 - (4) USB 2.0 ports (2 on rear, 2 behind front door)
 - (2) RS-232 serial ports (one 100-240 VAC power selectable 485/422/232)
 - Parallel port
 - PS/2 port (KB/Mouse splitter cable included)
- Additional Connectivity: 1
 - Audio (in/out)
 - DVI monitor connection
 - (2) USB 2.0 ports
- DRAM up to 4GB

- Up to two internal 250 GB SATA hard drives
 - Optional 40 GB Solid State SATA drives
- DVD-R/W drive
- One additional Front Access Bay
- 8-slot Passive Backplane with choice of 4 available slots: 2
 - (2) 1/2-length PCI
 - (1) full-length PCI
 - (3) full-length ISA
- supply (400 Watt)
- FCC, European CE, & RoHS compliant
- Windows® XP Pro
 - Windows 7 Pro 32-bit or Windows 7 Ultimate 64-bit optional
- 2-year Warranty

RM1400 Rackmount

The RM1400 is a 14-slot, high performance 4U Rackmount Industrial Computer with Intel Core 2 Duo and Quad processor options. The RM1400 has a standard rackmount form factor, making this unit ideal for industrial test stands, control room applications, and more.

RM1400 Standard Features

- High Performance Processor options to choose from:
 - Intel® Core® 2 Duo™ E8400 (3.0 GHz, 6 M cache, 1333 MHz bus)
 - Intel® Core 2 Quad Q9400 (2.66 GHz, 6 M cache, 1333 MHz bus)
- Extensive I/O Connectivity
 - Dual Gigabit 10/100/1000 Ethernet ports
 - (4) USB 2.0 ports (2 on rear, 2 behind front door)
 - (2) RS-232 serial ports (one selectable 485/422/232)
 - Parallel port
 - PS/2 port (KB/Mouse splitter cable included)
- Additional Connectivity: 1
 - Audio (in/out)
 - DVI monitor connection
 - (2) USB 2.0 ports
- DRAM up to 4GB

- Internal 250 GB SATA hard drive
 - Optional 40 GB Solid State SATA drive
- DVD-R/W drive
- Two additional Front Access Bays
- 14-slot Passive Backplane with choice of 10 available slots: 2
 - (3) 1/2-length PCI
 - (2) 3/4-length PCI
 - (2) full-length PCI
 - (3) full-length ISA
 - (1) 3/4-length ISA
- 100-240 VAC power supply (400 Watt)
- FCC, European CE, & RoHS compliant
- Windows® XP Pro
 - Windows 7 Pro 32-bit or Windows 7 Ultimate 64-bit optional
- 2-year Warranty

¹ Custom installed options that ship with units but utilizes open expansion slots.

² May require repositioning of I/O brackets.

General Features

(SB800 shown below)



High-Performance Processor Options

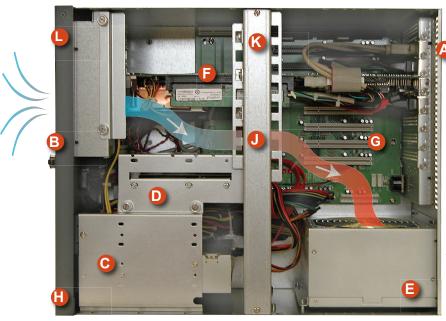
- Intel® Core 2 Duo® E8400 (3.0 GHz, 6 M cache, 1333 MHz bus)
- Intel® Core 2 Quad® Q9400 (2.66 GHz, 6 M cache, 1333 MHz bus)







- 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

SB800 Specific Features



Front Access Door DVD-R/W Drive, Second Removable Hard Drive Bay, 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 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) 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).



From

RM1400 Specific Features



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:

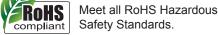
- (3) 1/2-length PCI
- (2) 3/4-length PCI
- (2) Full-length PCI
- (3) Full-length ISA
- (1) 3/4-length ISA
- * May require repositioning of I/O brackets

Shown (above) 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).

Standard 2-year warranty

Covers parts and service

 ϵ



www.nematron.com

Technical Specifications





Dimensions	SB800	RM1400
Height (H) x Width (W)	6.77" H x 12.99" W (172.0mm x 330.0mm)	6.97" H x 18.8" W (177.2mm x 478.10mm) (with rackmount handles)
		6.97" H x 16.8" W (177.2mm x 426.5mm) (without rackmount handles)
Depth (D)	16.64" D (422.0mm)	18.75" D (476.45mm) (with rackmount handles)
		18.03" D (458.06mm) (without rackmount handles)

Mounting Options









Vertical (with Mounting Brackets)

Horizontal (with Mounting Brackets)

Rack Height 4U

Shelf Mount (Brackets sold separately)

Physical		
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				
DRAM	2GB (240-pin DDR2 SO-DIMM, non-ECC, unbuffered, 800 MHz); 4GB Max	2GB (200-pin DDR2 SO-DIMM, non-ECC, unbuffered, 667 MHz); 4GB Max		
Internal Hard Drive	250GB SATA Conventional HD; 40GB SATA Solid State Drive option	250GB SATA Conventional HD; 40GB SATA Solid State Drive option		
Front Access Bay	DVD-R/W	DVD-R/W; Floppy Drive optional		
Second Front Access Bay	Removable 250GB SATA Conventional Hard Drive option	Removable 250GB SATA Conventional Hard Drive option		
Third Front Access Bay	N/A	Removable 250GB SATA Conventional Hard Drive option; RAID Level 1 Mirroring		

Processor	Core 2 Duo E8400	Core 2 Quad Q9400
Type & Processor	Intel Core 2 Duo E8400	Intel Core 2 Quad Q9400
Core Speed	3.0 GHz	2.66 GHz
L2 Cache	6MB	6MB
Front Side Bus	1333 MHz	1333 MHz
Chipset	Intel Q35 + ICH9DO	Intel Q35 + ICH9DO
Ethernet Controller	Intel 10/100/1000 (2 ports)	Intel 10/100/1000 (2 ports)
Operating System		
Standard OS	Windows XP Professional; Optional Windows 7 Professional 32-bit; Windows 7 Ultimate 64-bit; or No OS installed	
Electrical AC Input Voltage/Max Current Input Power	100-240 VAC, 47-63 Hz, 8.0 A Maximum 400 W	
Iliput rowei	400 W	
Environmental	Operating	Non-operating
Temperature ¹ / 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
	mperature specifications are for air temp surrounding the unit (i.e. inside any er lock & Vibration specifications established with Solid State drives and no rotatir	nclosure being utilized). ng media. ³ Altitude specification is established by using all internal component specificatio

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	
Ships With		
Contents Included	Power cord, Keyboard/Mouse splitter cable, Mounting hardware 1, Drivers & Manual, and additional hardware and slot covers for	
	configuring optional Audio, DVI & 2 USB ports (see page 2 for I/O connectivity)	

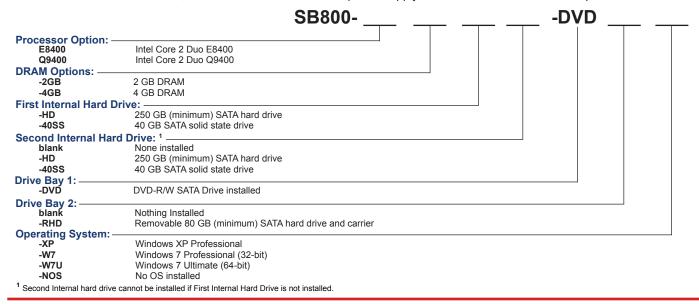
¹ SB800 included mounting brackets; RM1400 includes Rackmount Brackets only. Shelf mount brackets for RM1400 sold separately.

www.nematron.com 3

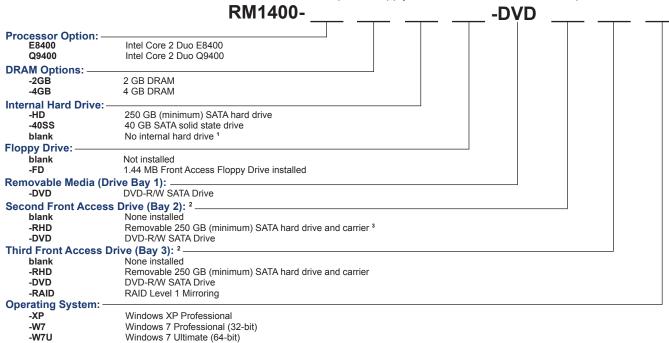


Order Number Generation

Base unit configuration: SB800-E8400-2GB-HD-DVD-XP - 8-slot Passive Backplane with Intel Core 2 Duo E8400 processor, 2 GB DRAM, 250 GB SATA Hard Drive, DVD-R/W drive, 400 Watt AC power supply and Windows XP Professional pre-installed.



Base unit configuration: RM1400-E8400-2GB-HD-DVD-XP - 14-slot Passive Backplane with Intel Core 2 Duo E8400 processor, 2 GB DRAM, 250 GB SATA Hard Drive, DVD-R/W drive, 400 Watt AC power supply and Windows XP Professional pre-installed.



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

No OS installed

Contact Information

-NOS

Headquarters - Nematron Corporation

5840 Interface Drive, Suite 100 Ann Arbor, MI 48103 USA Tel: 1.734.214.2000 Fax: 1.734.994.8074 Email: info@nematron.com



³ Must configure -RHD in Drive Bay 2 when selecting -RAID option in Drive Bay 3.