



# VRC 3900 Series Vehicle Radio Computers



## Online Data Transactions from Your Fork Lifts through a Choice of Radio Frequency Technologies

Symbol Technologies' VRC 3900 Series Vehicle Radio Computers turn your fork lifts into mobile data centers. Designed to mount directly to your fork lifts, the VRC 3900 enables operators to capture data on the factory floor or in the warehouse, then wirelessly download it to your host computer right from their vehicles. With the VRC 3900 your operators can also receive work instructions and information updates. The result is quicker access to vital data for faster, better informed management decisions, and more productive employees.

The VRC 3900 Series features two models to deliver the efficiency and immediacy of reliable, real-time communications:

► The VRC 3910 uses Symbol's Spectrum One® spread spectrum radio frequency (RF) network for online data exchange with your

host computer. This fast, interference-free wireless solution features a high-performance cellular design for reliable throughput while providing long-range operation and data security.

► The VRC 3940 employs Symbol's Spectrum24® wireless LAN technology. Designed to comply with the proposed IEEE 802.11 standard for wireless LANs, Spectrum24 is Symbol's next-generation wireless LAN. It features seamless connectivity to your host system with a commitment to open standards. Spectrum24's frequency hopping design makes it the ideal wireless LAN technology for operations requiring fast, high data throughput and increased network capacity.

## Built Tough, But Easy to Install and Operate

The VRC 3900 Series mounts easily and securely to your fork lifts and plugs in directly so there's no need for an additional power supply. Its rugged design protects it from the bumps, bangs, shocks and vibrations of factory floor and warehouse environments. An optional heater feature ensures the VRC functions reliably in extremely cold temperatures – even when it's -22°F/-30°C.

The large, fluorescent 8 x 40 character display is easy to view, even in dimly lighted warehouses, and the alphanumeric keyboard features oversized keys for accurate operation, even by employees wearing work gloves. Plus, the VRC 3900 Series supports a variety of additional devices, including hand-held laser scanners and printers.

## Built for Demanding Data Environments, Too

Powerful 16-bit DOS processing capabilities enable the VRC 3900 Series to handle the most demanding data capture applications. And the DOS operating environment permits easy software application development. Symbol also offers STEP software, IBM 3270/5250 emulation, TCP/IP connectivity or custom software for complete flexibility.

## Plug in Symbol's LS 3000 Scanners for High-Performance Data Capture

Symbol's LS 3000 Series laser scanners plug directly into the VRC to maximize your data collection capabilities. This series of ruggedized hand-held scanners reliably and accurately capture inventory, receiving and other data in the demanding environments of warehouses and factory floors. The LS 3200's extended operating temperature and bright beam make it ideal for data capture in rugged industrial applications; the LS 3200ER's ability to read a broad range of bar codes from 4" to 35'/10 cm to 10.6 m makes it a smart choice for warehouse applications; and the LS 3600 features Symbol's exclusive "fuzzy logic" technology to read poorly printed or damaged bar codes.

The VRC 3900 Series Vehicle Radio Computers: No fork lift should be without one. And no business should be without the support of Symbol Technologies, the world innovator in wireless LAN and bar code-driven data management systems, with more than 5 million scanners and terminals installed.

# VRC 3900 Series Vehicle Radio Computers Specification Highlights

## Physical and Environmental Characteristics

Dimensions:	9" W x 11.5" H x 2.5" D/229 mm W x 292 mm H x 64 mm D
Weight:	13.82 lbs./6.27 kg
Operating Temperature:	32° to 122° F/0° to 50° C -22° to 122°F/-30° to 50°C with optional heater
Storage Temperature:	-40° to 158°F/-40° to 70°C
Humidity:	95% relative humidity, non-condensing
Shock and Vibration:	Designed to function in industrial truck-mounted operations
ESD:	15 kV electrostatic discharge to all surfaces without loss of data
Keyboard:	54 large, hard, alphanumeric keys
Display:	8-line by 40-character (5 x 7 dot matrix) large vacuum fluorescent
Power:	24-48 VDC standard. Optional 12-24 VDC (power converter required) and 115 VAC/60 Hz (AC power adapter required)
Interfaces:	Rugged DE9 for laser scanners; rugged DB25 for RS-232 communications
Intrinsically Safe:	Class 1, Division 1, Group A, B, C, D

## Computer

CPU:	80c88 type @ 8 MHz
Operating System:	DOS
ROM:	128K EPROM (DOS, BIOS, Terminal Diagnostics)
RAM:	3910: 256K Standard, 640K Optional 3940: 640K Standard
Non-Volatile Memory:	3910: 256K Standard
Application Development:	Symbol Series 3000 Applications Development Kit

## Peripherals & Accessories

Laser Scanners:	Supports all Symbol hand-held scanners
Printers:	Supports extensive line of Symbol-approved printers, cables and accessories

## RF Communications

	3910	394X
Network:	Spectrum One®	Spectrum24®
Spreading Technique:	Direct sequence	Frequency hopping
Data Rate:	60.6 Kbps	1 Mbps
Antenna:	Internal	Internal, diversity
Range:	Open space: 1500'+/454 m+ Typical: 500'/151 m	Open space: up to 1000'/303 m; Typical: 180' to 250'/54.5 m to 76 m
Radio Channel Access Method:	CSMA/CA	CSMA/CA
Compliance:	FCC part 15 in U.S. only	FCC part 15 in U.S. only ETSI 300.328 in Europe, RCD STD-33 in Japan
Ethernet Compatibility:	Via Network Control Unit	DIX Ethernet
Output Power:	250 mW	See below
Frequency Range:	902 to 980 MHz	See below

### Spectrum24 Models:

Model #	Country	Output Power	Frequencies
3940	U.S.A	500 mW	2.4000 to 2.4830 GHz
3941	Europe ETSI	100 mW	2.4000 to 2.4835 GHz
3942	Japan	250 mW	2.4710 to 2.4970 GHz
3943	France	100 mW	2.4465 to 2.4835 GHz
3944	Spain	100 mW	2.4450 to 2.4750 GHz

Specifications are subject to change without notice.  
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For system, product or services availability and specific information within your country, please contact your local Symbol Technologies office or Certified Business Partner.



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