symbol®

LRT 3800 Integrated Laser Radio Terminal

INTEGRATED WIRELESS DATA TRANSACTION FOR SCAN-INTENSIVE APPLICATIONS

HIGH PERFORMANCE SPECTRUM ONE® TECHNOLOGY

Achieve real-time efficiency with spread spectrum RF communications. Symbol's Spectrum One® Network enables you to rely on wireless data transmission to expedite each transaction, and better manage information flow.

INTEGRATED LASER SCANNING

Increase productivity in scan-intensive applications. Integrating bar-code laser scanning and portable computing in one lightweight unit, the LRT 3800 leaves one hand free to manipulate hang tags or bar coded products.

ERGONOMIC DESIGN

Enhance working conditions by increasing user comfort. The LRT 3800's lightweight, well-balanced design reduces fatigue throughout the work shift, allowing employees to manage their tasks more easily.

POWERFUL DOS ARCHITECTURE

Benefit from the use of standard software development tools. Built with 16-bit DOS architecture, this powerful, portable wireless unit offers you advanced programming capabilities without requiring you to learn new software languages.

LARGE NUMERIC KEYS

Facilitate easy alphanumeric data input. A 46-key keyboard enables users to input both alpha and numeric data from the same keyboard state (no shift key required).

The LRT 3800 is an integrated laser data terminal combining the benefits of visible laser diode scanning, manual key entry, advanced computing, and RF communications into a lightweight, portable unit. With on-line transmission to your host system via the Spectrum One® Network, this high performance product allows you to improve employee productivity and better manage your business information.

Ergonomically designed for scan-intensive applications, the LRT 3800 frees the employee's other hand to expedite business tasks. And when alphanumeric input is required, the 46-key sealed rubber tactile keyboard makes manual keying simple and accurate. A Supertwist LCD backlit display features large characters for easy reading. The 16-bit DOS architecture provides easy development of demanding interactive programs for retail and industrial applications.

Constructed to withstand a four-foot drop to concrete, the LRT 3800 is also environmentally sealed against severe weather conditions. Because it is rugged, it delivers extended product life. Its real-time data transmission, coupled with powerful programming capabilities that are flexible and easy to use, allows you to quickly put the LRT 3800 to use for strategic management decision-making.

Retail

In the retail marketplace, where Quick Response translates into rapid delivery, reduced inventory and improved customer service, the LRT 3800 provides real-time data management. Equipped with the RF link, these terminals can be adapted for a variety of applications requiring instant access to different databases. For inventory counts, shelf price audit, receiving, stock transfers, price markdowns and purchasing, the LRT 3800's real-time access dramatically improves productivity. Employees can process data instantaneously as they adjust hand tags, shelf merchandise, and stockroom inventory. And by connecting the LRT 3800 to a PS 1000 Series portable printer, employees can generate new bar code labels for price markdowns or shelf label changes.
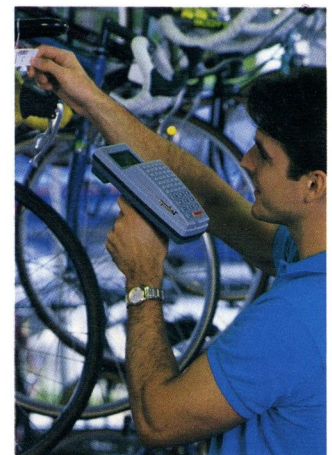
Industrial Applications

The LRT 3800 increases productivity at all levels of operation with a real-time database access in warehouses, transportation hubs, distribution centers, and manufacturing floors. In industrial settings, a long range version offers decoding at up to 60 inches away and a High Visibility version reads accurately in bright outdoor sunlight. The Extended Temperature Range model ensures reliable operation in cold environments, even at temperatures as low as -23°C. The LRT 3800's rugged construction can tolerate four-foot drops to concrete; plus its packaging is environmentally

sealed against wind-blown dust and rain.

Peripherals and Accessories

Symbol's complete line of peripherals is designed to tailor our portable RF terminals to your business application.
– The CCM 3860 Charging Module charges four internal and four external batteries at one time.
– The CBM 3866 Cradle Base Module charges four internal batteries.
– The CBU 3865 Single-Slot Cradle Base Unit charges one internal and one external battery for an LRT terminal.
– The Universal Battery Charger charges four batteries, offering deep cycle discharging for battery conditioning.
– The Printer Interface Module connects the LRT terminal to Symbol's PS 1000 Series portable printers for "scan, print, and apply" applications.
– The Holster attaches to the user's belt to protect and safely carry the LRT.

PROCESSOR/SOFTWARE ENVIRONMENT

Microprocessor: Integrated 80c88 compatible including DMA, Serial I/O, timers, V.25
Operating System: ROM-executable DOS (MS DOS v 3.3 compatible)
Base Configuration Memory: 128 KB EPROM for operating system, BIOS, diagnostics. 128 KB RAM. 128 KB NV RAM for user applications software.
Optional Additional Memory: Up to 640 KB RAM, 256 KB NV RAM
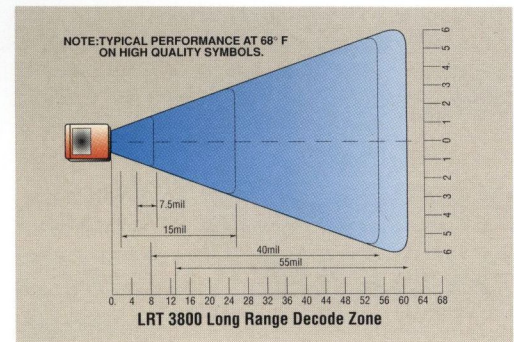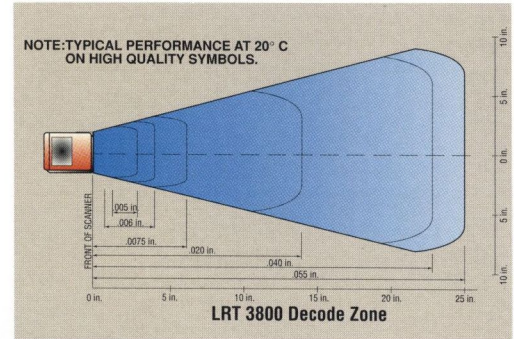**Clock Speed:** Real-Time Clock, 2/4/8 MHz software switchable

SCANNING SYSTEM

Type: Solid-state VLD, bidirectional, retrocollective
Scan Element: Low mass, double mirror
Light Source: 675 nm. laser diode
Scan Rate: 36 scans/sec.
Field Width: 20 in. (51 cm) max.
Working Distance: 25 in. (64 cm) max., Long Range 60 in. (152 cm)
Print Contrast Medium: 25% absolute reflectance as measured at 675 nm.
Skew Angle: ±65° (from normal)
Pitch: ±55° min. (L/R of normal)
Decode Capability: UPC/EAN, Code 39, Codabar, Interleaved 2 of 5, Code 128, Discrete 2 of 5, Code 93, Code 39 full ASCII (full autodiscrimination as required)

NOTE: TYPICAL PERFORMANCE AT 20° C ON HIGH QUALITY SYMBOLS.

LRT 3800 Decode Zone

SPECTRUM ONE® RF DATA COMMUNICATIONS MODULE

Operating Frequency: 905-928 MHz (spread spectrum modulation)
Spreading Code: Software generated
Effective Data Rate: 60.6 kbps
Output Power: 500 mw (approx.)
Typical Indoor Range: 500 feet (152 m)
Compliance: Meets FCC part 15 (for U.S. use only)

PHYSICAL AND ENVIRONMENTAL

Dimensions: 7.1 in. H x 8.4. in. L x 3.3 in. W (18.1 cm x 21.4 cm x 8.4 cm)
Weight (without batteries): 23 oz. (652.6 gm)
Laser Class: CDRH Class II
Power Source: Rechargeable, removable NiCad battery pack
Power Optional: 9-volt alkaline
Humidity: 5% to 95% (non-condensing)
Operating Temperature: -9° to 104° F (-23° to 40° C)
Non-Operating Temperature: -9° to 140° F (-23° to 60° C)
Shock: Unit functions normally after 4-foot (122 cm) drop to concrete
Static: 15 kV electrostatic discharge to all exposed surfaces without loss of data in RAM
EMI: Conforms to FCC Class A limits

NOTE: TYPICAL PERFORMANCE AT 68° F ON HIGH QUALITY SYMBOLS.

LRT 3800 Long Range Decode Zone