



# LS 6804 Integrated 2-D and 1-D Fixed-Mount Scanning Solution



The LS 6804 can be mounted either vertically or horizontally.

## High-Speed 1-D and 2-D Fixed-Mount Scanning Boosts the Accuracy and Efficiency of Your Operations

If your organization depends on the fast, efficient flow of materials, products, documents and information, you'll benefit from the speed and versatility of the LS 6804 Fixed-Mount Scanner from Symbol Technologies. In a single compact unit, this fully integrated scanner incorporates a high-speed raster scan engine for reading both 1-D bar codes and 2-D PDF417 symbols.

## Capture Data in Seconds—with or without an Operator

Whether for attended or unattended operation, the LS 6804 is fast and efficient. Operating at 560 scans per second, the LS 6804's dynamic raster pattern is optimized for rapid reading of 1-D and 2-D PDF417 symbols, minimizing the need to precisely position linear bar codes while delivering excellent accuracy even with poorly printed symbols. Triggered and continuous mode options make the LS 6804 even more flexible.

Mounted on an assembly line or conveyor belt, the LS 6804 scans typical 2-D symbols in less than a second and linear bar codes on items traveling by at speeds from one foot to several hundred feet per minute. Materials, inventory, and freight speed along unattended as the LS 6804 tracks their progress.

With an extremely small footprint, the LS 6804 is also ideal for hands-free scanning of paperwork, packages, parts and more in office and commercial environments where space may be limited. Plus, the LS 6804 is easily embedded in vending machines, diagnostic equipment and kiosks, bringing high-performance 1-D and PDF417 scanning to a variety of OEM applications.

## Cut Costs and Improve Productivity with the Latest 1-D and 2-D Scanning Technology

If you currently use both 1-D and 2-D PDF417 symbols to manage data, the LS 6804 is the only fixed-mount scanner you'll need. And, though you may rely on 1-D bar codes now, the LS 6804 offers an easy migration path to all the benefits of 2-D PDF417 technology.

An open systems standard invented by Symbol Technologies, PDF417 is an information breakthrough that allows over a kilobyte



of data to be stored in a single high-density printed symbol. With PDF417 "portable data files," all the information contained in documents and labels—such as shipping manifests, parts information, or

assembly instructions—can be easily stored and retrieved without the need for a link to an external database. Symbol PDF417 technology and the LS 6804 provide the ideal solution for applications where high-capacity, error-free data capture leads to dramatic cost-savings in time and labor.

## Compact, Rugged Design; Powerful Features

Thanks to the LS 6804's compact design, it fits in the smallest spaces, yet it packs powerful features and performance normally available only in larger, more expensive solutions:

- ▶ *Rugged, metal housing*—fully sealed rubber gasket enclosure for total protection even in the toughest working environments;
- ▶ *High-speed raster scan engine*—560 scans per second for fast, unsurpassed performance on both 1-D and 2-D PDF417 symbols;
- ▶ *Automatic or manual triggering*—flexible control of unattended or hands-free applications;
- ▶ *Integrated RS-232-C interface*—for direct connection to your host computer;
- ▶ *Synapse™ "smart cable"*—for instant interface with a wide variety of systems;
- ▶ *Host programming control interface*;
- ▶ *Flash memory*—for easy firmware upgrades;
- ▶ *A variety of optional mounting fixtures*—for convenient and flexible installation;
- ▶ *Raster height control*—for optimized scanning.

*continued on back page*

**Depend on Symbol for Smarter Scanning Solutions**

The LS 6804 Fixed-Mount Scanner is the perfect solution for any application where you need fast, accurate attended or unattended scanning:

- ▶ Manufacturing
  - Materials flow & product assembly
  - Process control & monitoring
  - Equipment calibration
- ▶ Warehousing & distribution
  - Shipping & receiving
  - Parts & inventory management

- ▶ Transportation & logistics
  - Freight & package handling
  - Bills of lading
- ▶ Government & public safety
  - License & registration documents
  - Logistics management
- ▶ Insurance & health care
  - Claims processing
  - Data & samples management
- ▶ OEM applications
  - Vending machines and kiosks
  - Diagnostic systems

Look to Symbol Technologies to provide solid scanning solutions for all your business needs. Anticipating your needs and responding to them has made Symbol Technologies the world leader in scanning solutions, with more than 5 million scanners and terminals installed worldwide.

## LS 6804 Fixed-Mount Scanner Series Specification Highlights

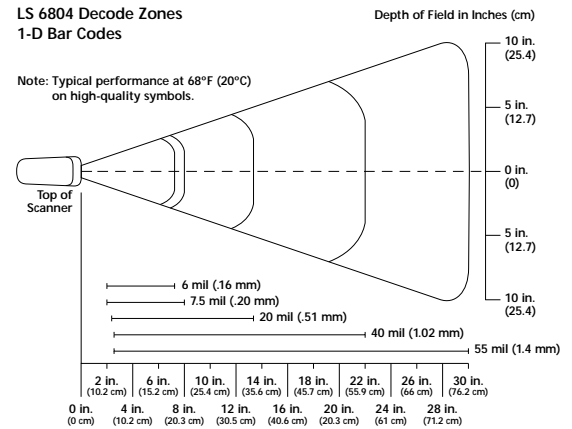
| Physical Characteristics |   |
|--------------------------|---|
| Dimensions:              | 4.5" L x 1.75" D x 2.75" W/114 mm L x 45 mm D x 70 mm W   |
| Weight:                  | 24 oz./681 gm   |
| Memory:                  | 64K RAM/128K Flash standard; 256K RAM/256K Flash enhanced |

| Performance Characteristics       |   |
|-----------------------------------|---|
| Interface Type:                   | Integrated RS-232-C with additional host interfaces supported by intelligent cables (Keyboard wedge, OCIA, Dual RS-232, etc.)   |
| Scan Element Type:                | Raster scanning, Retrocollective  |
| Light Source:                     | 650 nm laser diode/1 mW maximum   |
| Scan Rate (x):                    | 560 scans per second  |
| Frame Rate (y):                   | 25 frames per second  |
| Optical Resolution:               | Minimum X-dimension: 6.6 mil (0.17 mm); for PDF417<br>Minimum Y-dimension: 3X; VHD version (4 mil)  |
| Minimum Bar Width Print Contrast: | 25% (1-D symbologies); 35% (PDF417)   |
| Program Loading:                  | Parameters set by bar code menus or Host software; Flash memory for software upgrades   |
| Decode Capabilities:              | PDF417, Micro-PDF417, UPC-A, UPC-E, EAN 8, EAN 13, Code 39, Code 39 Full ASCII, Tri-Optic Code 39, Code 93, Discrete 2 of 5, Bookland EAN, UPC Coupon Code, Code 128, Interleaved 2 of 5, Codabar, UCC/EAN 128 with full autodiscrimination between all symbologies |

| User Environment        |  |
|-------------------------|--|
| Operating Temperature:  | 4° to 104°F/-20° to 40°C   |
| Storage Temperature:    | -40° to 140°F/-40° to 60°C   |
| Humidity:               | 5% to 95% (noncondensing)  |
| Ambient Light Immunity: | Sunlight: 8000 ft.-candles, 86,112 LUX<br>Incandescent, Fluorescent, Sodium Vapor, and Mercury Light: 450 ft.-candles, 4,845 LUX |
| Environmental Sealing:  | NEMA-12  |
| Agency Approvals:       | CDRH Class II, IFC 825 Class II, FCC Class A, UL, CSA, VDE, CE Class A   |

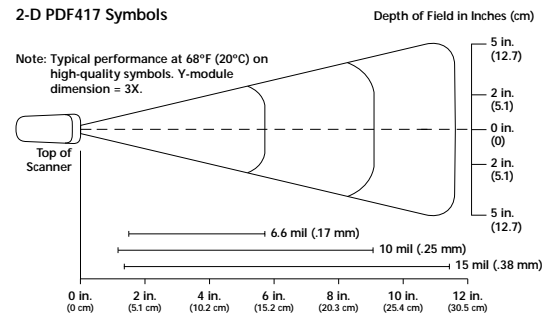
Specifications are subject to change without notice. Synapse is a trademark of Symbol.

LS 6804 Decode Zones  
1-D Bar Codes



LS 6804 1-D Decode Zone: Depth of Field as a function of minimum element width.

2-D PDF417 Symbols



LS 6804 2-D PDF417 Decode Zone: Depth of Field as a function of minimum element width.

For VHD decode zone, consult integration manual or visit our Web site at <http://www.symbol.com>



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