

# Symbol Cyclone What You Need to Capture the Future Today

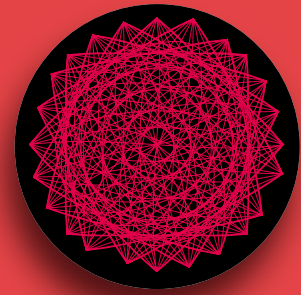
**symbol**

ADAPTIVE SCANNERS

Cyclone®  
Scanner Series

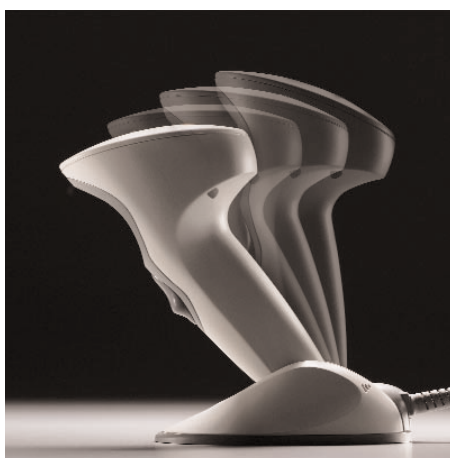


# Symbol's Cyclone<sup>®</sup> Captures More Data to Enhance Your Applications



Cyclone's rotating omnidirectional scan pattern reads even truncated bar codes.

Features	Benefits
Reads 1-D, 2-D, and Composite UCC/EAN and RSS bar code symbologies	Capture more data and "future-proof" your investment
Cyclone uses the latest, brightest visible laser diode technology	Scanner is easy to aim, even in the brightest sunlight
Scan pattern switches and mode indicator LEDs are top-mounted for easy viewing	Switching scan patterns is easy and convenient for operations with a mix of applications, bar codes and merchandise
Hand-held or hands-free operation	Operators can scan heavy and bulky items without lifting them onto the checkstand; scan smaller items without lifting the scanner
Built-in, adjustable stand	Operators adjust the Cyclone to their preference to optimize efficiency for maximum throughput



The adjustable built-in stand pivots to make scanning items easy—no matter how large or small.

A smart investment, Symbol's innovative new scanner is future-ready now. The Cyclone scanner decodes existing, new and emerging bar code symbologies instantly. The Cyclone scanner is packed with features that deliver optimum flexibility including next generation scanning technology. As good looking as it is practical, the Cyclone's sleek design complements any store's decor. Large merchandise or small, single or multiple bar code types, this scanner can handle it all.

Revolutionary user-selectable scan pattern versatility plus remarkable ease of use and adaptability make the Adaptive "Cyclone" Scanner Series from Symbol Technologies a standout for bar code scanning at point of sale.

## Reads Current and New UCC/EAN Symbologies with Ease

New ways of doing business require new types of bar codes to keep products flowing smoothly from producer to user. The Cyclone scanner was designed to handle new and emerging UCC/EAN-driven symbologies:

**The UCC/EAN Reduced Space Symbology (RSS)** is a "stacked" linear bar code for items previously too small to be marked. Track previously untrackable data on products so that lot numbers, expiration dates, weights, prices and currency information are included in the bar code.

- Retail General Merchandise: Label items with complete product identification for better management of inventory and profitability.
- Convenience Stores and Food Stores: Encode random quantity and weight products, such as meat, produce and cheeses with product identification information for better inventory management and to simplify the order and fulfillment process.

**The UCC/EAN Composite Symbology (CS)** combines the standard linear UPC/EAN/JAN code, a proven tool for POS checkout, receiving and inventory tracking, with a two-dimensional (2-D) PDF417 portable data file that incorporates extended product information.

- Healthcare: Hospitals, drug stores and pharmacies can trace manufacturing lot numbers on pharmaceuticals and other controlled substances. Caregivers can streamline prescription processing and verify patient ID by scanning patient identification cards.
- Logistics: Gain access to shipping as well as content information at any point in the supply chain.
- Retail Food: Shopkeepers can record purchase data and identification cards with a single scan of the composite code.



UCC/EAN Composite Symbology combines 1-D and 2-D scanning capabilities.



PDF417 bar codes are ideal for age verification applications.



High-density single line scanning makes quick work of pick lists and bar coded menus.

The identification and shipping data is securely attached to the product—stored on a bar code no bigger than a postage stamp.

**Portable Data File (PDF)** is a 2-D data file that holds up to 1 kilobyte of data.

- **Age Verification:** Many authorities now encode the date of birth in the PDF symbol on a driver's license, preventing the sale of alcohol or tobacco products to underage customers.
- **National Identification Cards:** Many countries use national ID cards to open credit and telephone accounts and for identification at border crossings.
- **Customer Loyalty Cards:** Track customers' shopping habits.

### Choose the Best Scan Pattern for Your Application

At the point of sale, the Cyclone scanner captures bar code data instantly, shorting checkout lines with “point-and-scan” performance on 1-D, 2-D, RSS and CS symbologies.

**Cyclone Omni-Directional Scan Pattern:** A rotating omni-directional scan pattern reads even truncated bar codes by eliminating scan pattern “holes.”

**Raster Scan Pattern:** The Cyclone's scan pattern automatically covers 2-D and CS symbols for the best scanning performance on damaged and poorly printed bar codes, while eliminating the need for operator training.

**Semi Omni Scan Pattern:** The “Semi Omni” scan pattern is a combination of the omni-directional and raster scan patterns. This unique pattern has superb decoding performance on extremely truncated bar codes that you find on small items in convenience, drug and specialty stores.

**High Density Single Line Scan Pattern:** The Cyclone's single scan line appears as a “mini” raster and scans multiple areas of 1-D codes to swiftly and accurately capture data on poorly printed and damaged bar codes. The single line is ideal for reading bar coded menus and pick lists.

Bright LEDs indicate which scan pattern is working. For intuitive aiming accuracy, even in the brightest lighting conditions and for can't miss, single-pass scanning, the laser diode emits a highly visible beam for easy-to-see scan patterns. When you lift the scanner off the counter, it automatically switches from hands-free to hand-held mode. The Cyclone immediately adjusts the scan pattern for optimum hand-held data capture. Put the scanner back on the counter and it automatically returns to hands-free mode. If countertop space is at a premium, just place the Cyclone in the optional wall-mount stand.

### Premium Features and Unique Ergonomics Adapt to Many Uses

The Cyclone's adjustable, built-in stand accommodates scanning a wide range of item sizes for efficient throughput. The ergonomically shaped handle fits snugly in the hand to ensure a secure grip. The large, contoured scan trigger is handle-mounted for easy point-and-shoot operation. The patented two-finger trigger operates with minimum effort and delivers superior sensory feedback.

There's no need to change the scanner's orientation when changing the scan pattern. All of the scan patterns exit the Cyclone from the large, scratch-resistant and deeply recessed window at the front of the scanner. The broad, rounded stand supplies rock-solid support for checkstand or countertop use. For maximum non-slip security, rubber feet cushion the bottom of the scanner.

### Ingenious Design Provides Superior Throughput

Symbol's attention to detail comes through in design elements such as the twin beepers built into the sides of the Cyclone scanner handle. The scanner beeper is loud enough to be heard by operators working in noisy environments.

Cyclone scanners offer a host of high-performance features for unmatched adaptability at the point of sale. The Cyclone provides direct connections to IBM, USB, RS-232 and Symbol's Synapse “smart” cabling that provides connectivity to all popular host terminals. Synapse Smart Cables eliminate the need for separate scanner-to-host controllers. Electronic Article Surveillance deactivation is also an option; locating the deactivation antenna within the scanner saves precious space at the point of sale, and eliminates secondary operations.

Advanced Data Formatting, another Symbol breakthrough, enhances Cyclone data capture productivity. No need to modify host-system software to match data input formats. Instead, simply program the Cyclone. The scanner translates the bar code string and, for later tracking, stamps the bar code prefix with time, date and the number of the employee who scanned the data.

Like every scanner from Symbol, the Cyclone is an unbeatable value because it is backed by Symbol's global network of service and support from the world leader in bar code-driven data management systems, with millions of scanners and terminals installed. To find out more about the Cyclone scanner, call any of the convenient locations listed on the back, or visit us at [www.symbol.com/barcode](http://www.symbol.com/barcode)

# Cyclone® Scanner Specification Highlights

## Physical Characteristics

Dimensions:	7.8 in. L x 3.4 in. W x 5.4 in. D/198 mm L x 86 mm W x 137 mm D
Weight:	12 oz./340 gm
Mounting Options:	Wall-mount stand
Durability:	Withstands multiple 4 ft./1.2 m drops to concrete

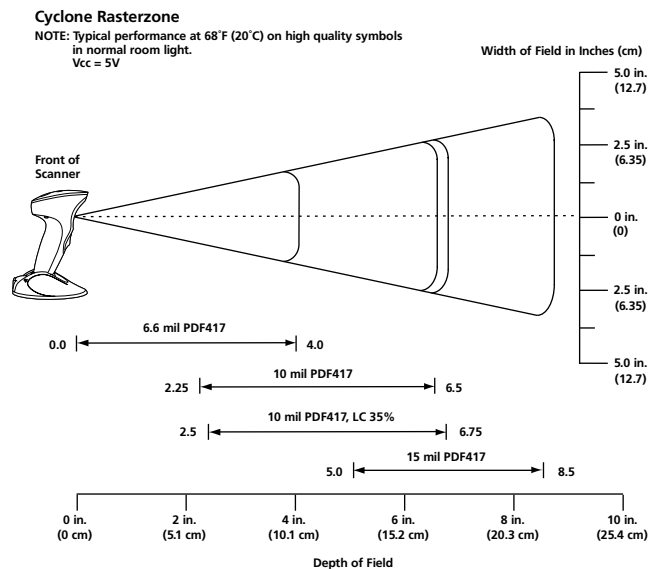
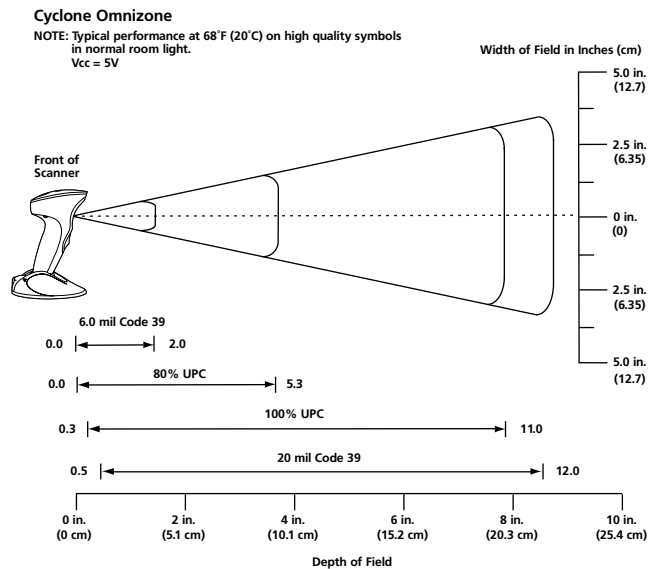
## Performance Characteristics

Light Source:	630–650-nm laser diode
Scan Pattern:	Single line, 2-D Raster, omni-directional, semi-omni-directional
Frame Rate:	Omni-directional: 640 x 22 frames/sec. Raster: 590 x 22 frames/sec. Single Line: 590 x 22 frames/sec.
Optical Resolution:	Raster/Single Line: Can decode a 6.6 mil (minimum X-dimension) symbol (PDF417); Y-dimension must be 3x Omni-directional: Can decode a 5.5 mil (minimum X-dimension) symbol
Codes Supported:	1-D Symbology: UPC/EAN/JAN, NW7, Code 128, Code 39 Full ASCII, MSI/Plessey, Interleaved 2 of 5, Discrete 2 of 5, UCC/EAN, 128, Codabar; 2-D Symbology: PDF417; Composite Codes: UCC/EAN, RSS Code. Ask about other codes that are supported
Print Contrast:	25% minimum reflectance (1-D) 35% minimum reflectance (PDF)
Interfaces Supported:	IBM 468X, 469X; Universal Serial Bus (USB), RS-232C, Wand Emulation, OCR, OCIA, Fujitsu, ICL, NCR, Nixdorf, Omron, TEC, Sharp, Casio POS and Computer Keyboard Wedges from IBM, DEC Telex, NCR, WYSE, HP and other manufacturers

## User Environment

Ambient Light:	Immune to normal artificial indoor and natural outdoor (direct sunlight) lighting conditions Fluorescent: 450 ft.-candles; Incandescent: 450 ft.-candles; Mercury Vapor: 450 ft.-candles; Sodium Vapor: 450 ft.-candles; Sunlight: 8,000 ft.-candles
Operating Temperature:	32° to 104°F (0° to 40° C)
Storage Temperature:	-40° to 140°F (-40° to 60° C)
Humidity:	5% to 95% (noncondensing)
Power:	5.2 VDC ± 10% @ 400 mA nominal (1.6 watts nominal)
Product Safety:	United States: UL1950, 1995 Worldwide: EN 60950: 1992 +A1, +A2, +A3 IEC 950/ European Union Requirement Canada: CAN/CSA C22.2#950-95
EAS Support:	Checkpoint Electronic Article Surveillance EAS
Regulatory	
Electrical Safety:	Certified to UL 1950, CSA C22.2 No. 950 EN60950/IEC950
EMI/RFI:	FCC Part 15 Class B, ICES-003 Class B, European Union EMC Directive, Australian SMA
Laser Safety:	CDRH Class II, IEC Class 2

**EN410 CE**



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- ✓ *WWAN, WLAN design & installation*
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- ✓ *Mobile computers*
- ✓ *Data collection terminals*
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Product specification sheet provided by TPI

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