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## Symbol MC50 Review

**Product:** MC50

**Manufacturer:** Symbol

**Type:** PocketPC-based Mobile Computer

**Support:** 1 Year warranty through Symbol; Lifetime Support from POSGuys.com

The Symbol MC50 mobile computer is Symbol's entry into the low-cost Windows-based mobile computer market. It features your choice of 1D laser scanner or 2D imager, as well as 4-key or QWERTY style keypads.

### Typical uses and environments:

The MC50 is best suited for mobile inventory management and field sales crews.

### Unique Features & Advantages:

The MC50, like other mobile computers, features an SDIO expansion slot on the top of the unit. To aid in securing the card within the MC50, Symbol designed the port cover to screw to the unit, locking the card in and preventing dust and other yuck from getting into the mobile computer.

### Standard Features:

The Symbol MC50 comes standard with a 1D laser scanner or 2D imager, 4-key palm-style or QWERTY keypads, and standard or extended batteries. It runs Microsoft Windows Mobile 2003 (PocketPC 2003) on an Intel XScale 520 MHz processor. An LED on the top of the unit shines red when the scanner is activated, and turns green on successful scans. A system beep or wav file can be played to provide an audible notification of successful scans.



### Performance:

To determine the performance of the Symbol MC50 mobile computer, we ran it through a series of tests designed to show ease of installation, scanning prowess, and battery life. The unit we tested was MC5040-PK0DBQEA7WR, which features a 1D/2D imager, 802.11 wireless card, and QWERTY keypad. Our tests showed that, while the imager is not as strong as its 1D laser counterpart, this MC50 has solid features ideal for a variety of mobile locations.

Setting the PC up to work with the MC50 involves installing Microsoft's ActiveSync software. After plugging the MC50 into the PC via interface cable or charging/sync cradle, the PC will automatically detect and install the drivers. Plug and play set up for mobile computers is tremendously important, and Symbol continues to set the bar for ease of installation.

The optimal scan range for the 2D MC50 was from about 2" to 8" for 100% UPC-A barcodes, more than adequate for mobile barcode scanning and data collection, yet still relatively short compared to laser scanners on the market. The densest barcode it could scan was 7.1 mil, relatively average for barcode scanners. It could scan as large as 68 mil from beyond 8", implying the scanner can read from farther away on

sufficiently low-density barcodes.

Though limited in range, the 2D imager showed tremendous prowess in scanning damaged and differently colored barcodes, reading every damaged barcode as well as the red barcode on white background. This scanning prowess

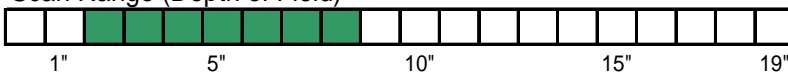
would make the MC50 an ideal fit in shipping and receiving locations, where barcodes could be damaged in transit. The 2D imager on the MC50 is also strong enough to resist direct sunlight, as well as our spotlight nearly touching the barcode. For outdoor barcode scanning, this resistance is incredibly important.

Battery management is pretty basic, allowing the user to set when the screen shuts off, when the MC50 turns off, or whether it receives IrDA signals. To further test battery longevity, we played a 20 minute video encoded in XViD format with a video data rate of 148kbps. The video played incredibly with no lag or dropped frames, and only used 13% of the battery life. Extrapolating that out gives about 3 hours of battery life under load, excellent for daily use.

A breakdown of the Symbol MC50 capabilities is listed in table and graph form below.

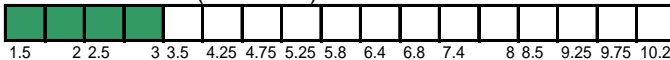
## Scanner Performance Testing

### Scan Range (Depth of Field)



Limited scan range  
for most environments

### Wide Barcodes (In Inches)



Scans well above standard  
retail/light industrial sizes

### High Density Barcodes (In Mil)



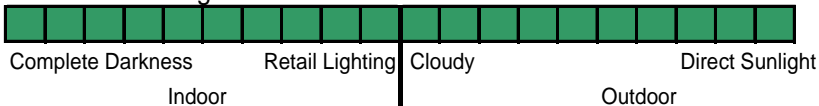
Standard range for retail  
and industrial barcode density

### Poor Quality Barcodes\*



Could read most damaged  
barcodes. Average robustness

### Resistance to Light



Full Light Immunity

## 1D Results

Highest Density Barcode Scanned	7.1mil	Average
Widest Barcode Scanned	88.9mm	Average
Shortest Barcode Scanned	38 mm	Good
Range Ideal Conditions (Standard 100% UPC-A)	4 inches – 8 inches	Average
Scratched Barcode	1 of 3	Poor
Worn Barcode	2 of 3	Good
Warped Barcode	1 of 2	Average
Curved Barcode	1 of 2	Average




Multiple Barcodes in close proximity	Relatively accurate, but dependent on distribution of barcodes relative to size of aiming reticule	Average
Scan through plastic layers	10 Layers	Good
Multicolored Barcodes Successfully Scanned	Red, Green, Blue, Orange, Black on Brown	Good
Multicolored Barcodes Not Scanned	Yellow, Light Grey	Average
Simulated Sunlight Test	Fully Immune	Excellent

**Conclusion:**

The Symbol MC50 is an excellent device if you are looking to go mobile with your sales crew or inventory management. We strongly recommend the 1D laser scanner based model, as the scan engine is much more aggressive than the 2D imager option.

To Purchase this product, go to the [Symbol MC50](#) page.

For Additional Reviews, visit our [Product Reviews](#) page.

	Ideal Setting	Description
 <a href="#">MC35</a>	Field managerial operations	The MC50 merges smart phone features with data collection technology to provide an elegant solution for those needing to scan some barcodes and minimize equipment carried.
 <a href="#">MC50</a>	Warehouse-style data collection, route sales management	The MC50 provides 1D or 2D scanning and WiFi to keep data synchronized.
 <a href="#">MC70</a>	Rough field operations, locations requiring multiple communications methods	The MC70 is a more durable upgrade to the MC50, adding Bluetooth and WWAN radios to keep field workers in communication.

[POSGuys.com](#) - your single source for barcode scanners, pos software and pos equipment.

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