



FM480 Series

A Durable, High Performance Fixed Mount Scanner for General Purpose and Industrial Applications



Integrated with the innovative FuzzyScan 3.0 Imaging Technology and durable ultra-compact design, the FM480 series Fixed Mount Scanner from Cino impresses the user with outstanding scanning performance and industrial level dependability. This cost-effective FM480 creates the best value to boost your productivity for industrial and general purpose applications.

Ultra-compact yet durable design

Thanks to the ultra-compact, robust overmold and IP54 rating construction, the FM480 is not only ideal for embedded scanning solutions such as kiosks and lottery terminals, but also perfect for industrial applications such as conveyer line scanning and test tube verification. The choice of front-view or side-view model and the design of industrial level M3 mounting holes make F480 easy to be mounted anywhere and integrated with any device.

Rich user interface and useful test mode

Equipped with 3 visible LED indicators and audible beeper, FM480 provides intuitive indication for users to monitor the reading status. The useful test mode allows users to identify the optimal reading position with ease.

Outstanding reading performance

The FM480 provides superb performance on reading damaged, smudged, poorly-printed and low contrast barcode labels that are commonly found in the real world quickly and accurately.

Durable overmold construction and IP54 design

Ultra-compact and easy mounting design for flexible integration

Choice of front-view or side-view model for diverse application demands

Rich indication and user interface for intuitive operation

Support both external trigger and serial trigger

Additional OK and NG output signals for precise reading control

Useful test mode for quick and optimal installation

Outstanding reading capability on 3 mil barcode with more than 3" depth of field

Up to 34" reading range on general barcodes

High speed scanning rate up to 500 scans per second for snappy barcode capture

Unsurpassed readability on low contrast, soiled, poorly-printed or damaged barcodes

Supports GS1 DataBar, PDF, MicroPDF and composite code





Specifications

Performance Characteristics		
Optical System	High performance Linear Imaging Engine	
Print Contrast	20% minimum reflective difference	
Minimum Resolution	Typical 3 mil (Code 39, PCS 0.9)	
Working Distance ¹ *	Up to 24 inches on 100% UPC/EAN symbols Up to 34 inches on 20 mil Code 39	
Light Source	630nm visible red LED	
Scan Rate	Dynamic scanning rate up to 500 scans per secon	
Reading Direction	Bi-directional (forward and backward)	
Pitch/Skew/Tilt	± 65°/65°/55°	
Operating Modes	Trigger, Alternative, Level, Force, Presentation	
Host Interfaces	RS232 serial USB HID (USB Keyboard) USB COM port emulation	
User Interfaces	3 LEDs for power, Status, OK/NG indications Test button Programmable beeper	
Configuration Setup	Bar code command, Serial command Windows utility - FuzzyScan PowerTool	
Data Editing	Condensed DataWizard via bar code command Full-feature DataWizard via FuzzyScan PowerTool	

Physical & Electrical Characteristics		
Dimension	47.6 mm (L) x 40.6 mm (W) x 23.1 mm (D) 1.87 in. (L) x 1.60 in. (W) x 0.91 in. (D)	
Weight	120g (RS232 and Universal version) 95g (USB version)	
Scan Window	Choice of front-view or side-view model	
Connector	9-pin D-sub female (RS232 version) USB 4-pin Type A (USB version) 15-pin D-sub HD female (Universal version)	
Mounting	2 screw holes (M3 x 4mm in depth)	
Input Voltage	5VDC ± 10%	
Current	Operating : Typical 165 mA @5VDC Standby : Typical 70 mA @5VDC	

Safety & Regulatory		
EMC	CE,FCC,BSMI,VCCI, KC	
Safety *2	LED Eye Safety IEC62471, Exempt Group	
Environmental	Compliant with RoHS directive	

USB Power Steal Cable

5VDC Power Suply Unit

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(FM488)

1D Linear

(FM480)

Code 39, Code 39 Full ASCII, Code 32, Code 39 Trioptic Others

(FM480)

Code 128, GS1-128, Codabar, Code 11, Code 93

Standard & Industrial 2 of 5, Interleaved & Matrix 2 of 5

German Postal Code, China Postal Code, IATA

UPC/EAN/JAN, UPC/EAN/JAN with Addendum

Telepen, MSI/Plessey & UK/Plessey

GS1 DataBar (formly RSS) Linear, Linear-stacked

Linear-stacked

PDF417, Micro PDF417, Codablock F, Composite

Accessories

Cables

User Environment			
Drop Specifications	Withstand 1.5m/5ft. drop to concrete		
Environmental Sealing IP54			
Operating Temperature10 °C to 50 °C (14 °F to 122 °F)			
Storage Temperature	-40°C to 70°C (-40°F to 158°F)		
Humidity	5% to 95% related humidity, non-condensing		
Ambient Light Immuni 6 y~ 100,000 lux			
ESD Protection	Functional after 15kV discharge		



- 1. The reading distances are measured under Cino's test environmental condition.
- 2. Class 1M LED product. Do not view directly with optical instruments.



