FUZZYSCAN
www.cino.com.tw

SM380 Series

A self-contained linear-imaging OEM scan module for barcode scanning applications

- Compact and easy mounting design allowing for flexible integration
- On-board beeper and LED indicators provide clear user feedback
- Support RS232, USB COM and USB HID host interfaces
- Useful test mode helps to identify the optimal mounting position
- Flexible user-defined serial trigger command supported
- Support serial command trigger and external trigger
- OK and NG output signals supported for precise reading control
- Read most of popular 1D and linear-stacked barcodes
- Read 3 mil barcode with more than 3″ depth of field
- Up to 31.5″ reading range on general barcodes
- Aggressive decoding ability on reading low contrast, soiled, poorly-printed or damaged barcodes
- DataWizard Premium supported for scanned data manipulation and security protection
- Ideal for embedded barcode scanning applications

The FuzzyScan linear-imaging OEM scan module SM380 series is designed with system integration in mind, it combines all characteristics of FuzzyScan fixed-mount scanner in a small and compact package. SM380 uses the latest FuzzyScan 3.0 imaging technology for outstanding reading performance on most 1D and linear-stacked barcodes. Moreover, thanks to the miniature and ease-of-integration design, the system designers can integrate it into various automated or semi-automated devices easily with little expertise in scanning technology. It provides a superior cost-performance solution for embedded barcode scanning applications. It lowers customer's development costs and accelerates product time to market.

Compact and Easy-to-Integrate Design

By its compact and easy-mounting design, SM380 series can be integrated into various space-limited OEM devices easily. Moreover, it's equipped with intuitive LED indicators and user-configurable beeper for clear operation status indication. The SM380 series supports multiple host interfaces including RS232, USB COM and USB HID. By these value-added features, SM380 series makes integration efforts minimized and profit maximized.

FuzzyScan 3.0 Outstanding Reading Performance

Powered by FuzzyScan 3.0 Imaging Technology, SM380 series provides superior reading performance on most popular 1D and linear-stacked barcodes. Besides, it can read barcodes which are damaged, smudged, poorly-printed, laminated or at low contrast on physical hard-copy paper or LCD screen accurately. SM380 is capable of reading 3 mil barcode with more than 3″ depth of field and up to 31.5″ reading distance on general barcodes.

Useful Features and Functionality

The test mode helps system integrator to identify the most optimal mounting position easily and quickly. SM380 supports five operation modes, allowing for trigger or triggerless operations. Moreover, it can be triggered remotely through the input of serial command or external sensor. The OK/NG signal output function helps more precise reading control.

cino®

Specifications

Performance Characteristics

Scan Pattern	Linear Image
Print Contrast	20% minimum reflective difference
Minimum Resolution	Typical 3 mil (Code 39, PCS 0.9)
Reading Range *1	Up to 24 inches on 100% UPC/EAN symbols Up to 31.5 inches on 20 mil Code 39
Light Source	630nm visible red LED
Scan Rate	Dynamic scanning rate up to 500 scans per second
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

Supported Symbologies

1D Linear	Code 39, Code 39 Full ASCII, Code 32, Code 39 Trioptic Code 128, UCC/EAN-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

User Environment

Operating Temperature	-10˚C to 50˚C (14˚F to 122˚F)
Storage Temperature	-40˚C to 70˚C (-40˚F to 158˚F)
Ambient Light Immunity	0 ~ 100,000 lux

Physical & Electrical Characteristics

Dimension	30.2 mm (L) x 33.6 mm (W) x 15.5 mm (H)
Weight	9 g
Connector	15 pin interface connector
Mounting	2 screw holes (TP 1.7 screw, ø1.2mm x 4mm in depth)
Input Voltage	5VDC ± 10%
Current	Operating : Typical 165 mA @5VDC Standby : Typical 70 mA @5VDC

Safety & Regulatory

Safety *2	LED Eye Safety IEC62471, Exempt Group
Environmental	Compliant with RoHS directive

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