

SPECIFICATION

Customer : _____

Customer's Model No. : _____

Model No. : MCR8 Series Models _____

Date : _____

Sample Serial No. : _____

Spec. Version & Revision Date: V1.0 2004.09.30 _____

Received/Approved by



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Revision History

Version	Date	Context
1.0	2004.09.30	Golden release



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A. General Description

This compact long-range CCD barcode scanner modules scans up to 8" from the window. With remote-operation ability, high ambient light resistance (100,000 LUX) and fast scan rates (270 scans/sec), this MCR8 is suitable for application where needs a high performance and small foot-print and the reliable operation.

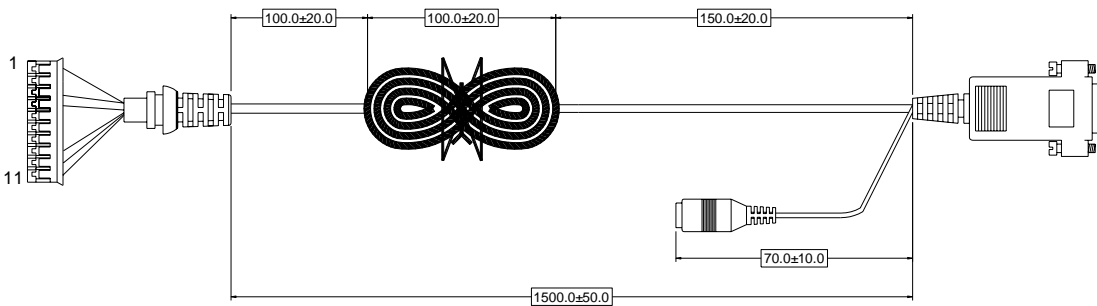


B. Physical Characteristics

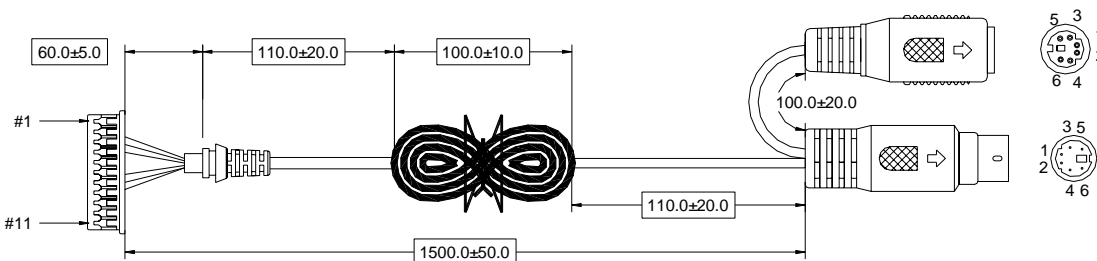
Weight	
Body weight	Approx. 1.24 oz (35 gm)
Cable weight	Approx. 2.65 oz (75 gm)
Material	
Cable Length	5FT. (150cm)
Connector	
Dimension	48 mm X 38 mm X 28 mm

(a) Cable drawing

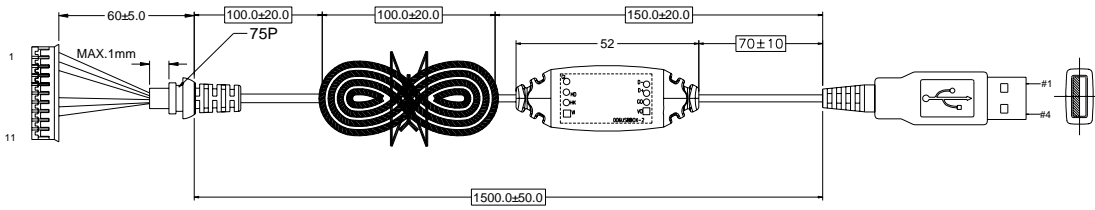
(1)RS232



(2)Keyboard

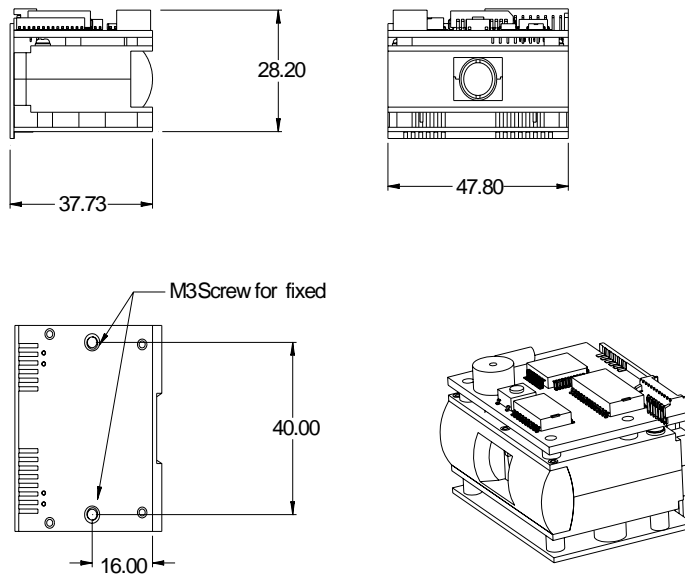


(3)USB



(b)Mechanical drawing

Units :mm



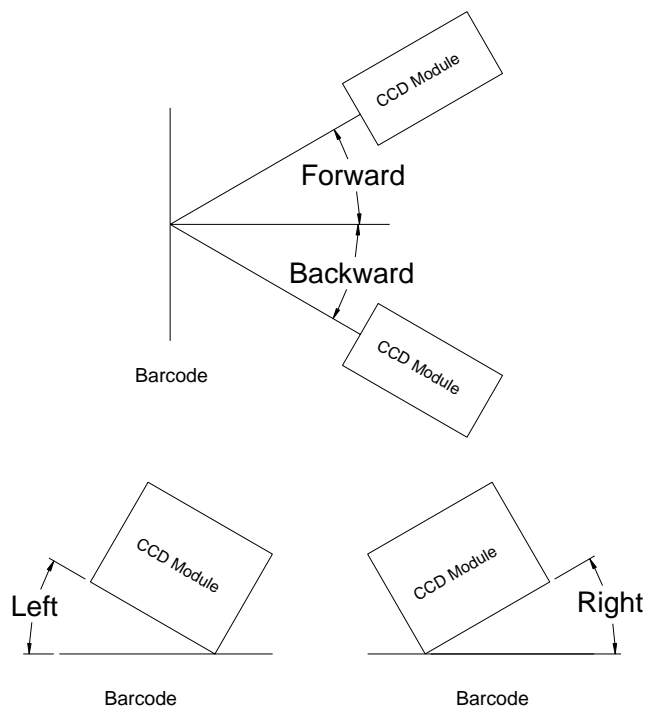
C. Electrical Characteristics

Interface	RS232	RS232 TTL Level	TTL	KB	USB
Supply Voltage	DC +5V ±5%				
Output Voltage (Typ.)	±9V	+5V	+5V	+5V	+5V
Output low Voltage (Max.)	-	0.7V	0.7V	0.7V	0.4V
Current Draw					
Power On (Typ.)	130 mA	110 mA	115 mA	115 mA	120 mA
Stand by (Typ.)	115 mA	95 mA	100 mA	100 mA	105 mA
Operation (Typ.)	145 mA	125mA	130 mA	130 mA	135 mA



D. Performance

Light Source	639 nm
Sensor	Linear CCD Sensor
Processor Type	8051 compatible
Operating Freq.	36.864 MHz
Scan Rate	270 scans/sec
Reading Distance	230 mm
Width of Field	80 mm
Print Contrast Ratio	PCS 0.45 @ 0.1mm
Resolution	0.1mm @ PCS 0.9
Reading Angle	<i>Test Conditions: Code 39, 10mil, PCS 0.9</i>
Forward & Backward	$\pm 70^\circ$
Left & Right	$\pm 60^\circ$
Dead Zone	$\pm 5^\circ$
Ambient Light	100000 Lux Max. @ Direct sun light



E. Environmental

Operating Temperature	0 °C to 50 °C (32 °F to 122 °F)
Storage Temperature	-20 °C to 70 °C (-4 °F to 158 °F)
Relative Humidity	20% to 95% (Non-condensing)

F. Readable Symbologies

	Readable	Default Enable
All UPC/EAN/JAN	V	V
EAN128 Code	V	V
Code 39	V	V
Code 39 Full ASCII	V	
Code32 / Italian Pharmacy	V	
Code 128	V	V
CODABAR/NW7	V	V
Interleave 25	V	V
Industrial 25	V	
Matrix 25	V	
MSI/PLESSEY	V	
Telepen	V	
Code 93	V	
Code 11	V	
China Postage	V	

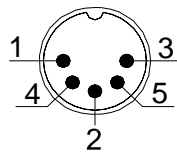


G. Pin Assignment

(a) Keyboard Interface

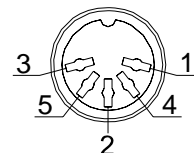
DIN 5 MALE

Pin No.	Function
1	HOST CLK
2	HOST DATA
4	GND
5	Vcc(+5V)



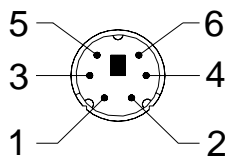
DIN 5 FEMALE

Pin No.	Function
1	KB CLK
2	KB DATA
4	GND
5	Vcc(+5V)



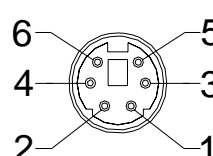
MiniDIN 6 MALE

Pin No.	Function
1	HOST DATA
3	GND
4	Vcc(+5V)
5	HOST CLK



MiniDIN 6 FEMALE

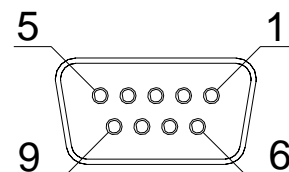
Pin No.	Function
1	KB DATA
3	GND
4	Vcc(+5V)
5	KB CLK



(b) RS-232 Interface

DB 9 Female

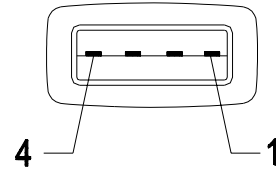
Pin No.	Function
2	TXD
3	RXD
5	GND
7	CTS
8	RTS
9	Vcc/+5V
Power Lead	Vcc/+5V



(c) USB Interface

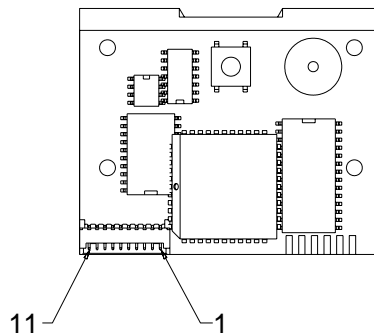
USB A Type Male

Pin No.	Function
1	Vcc
2	D-
3	D+
4	GND

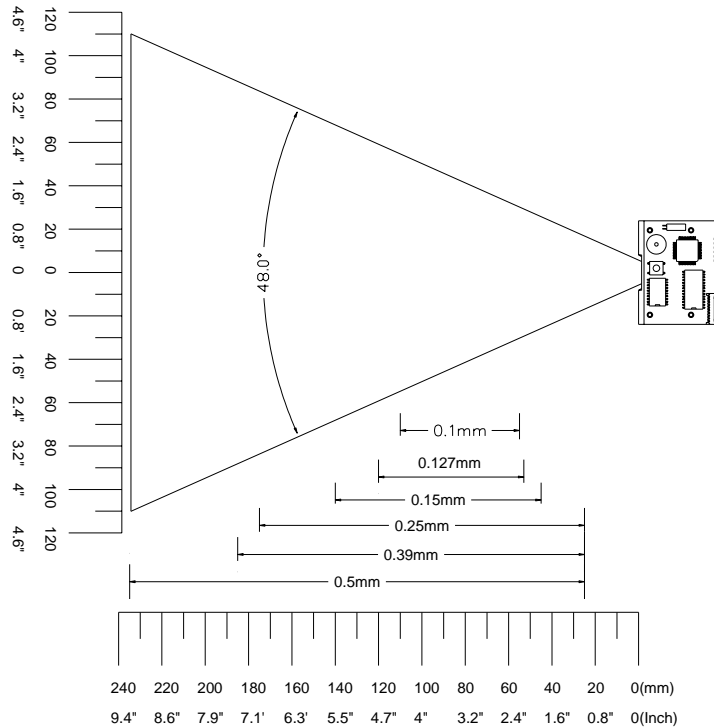


(d) Decoder Data Output Connector(JAE P1.25 11P Or Compatible)

Function	Pin No.	Function	Pin No.
GND	1	PCCLK	6
VCC	2	KBDAT	7
TXD	3	KBCLK	8
RXD	4	RTS	9
PCDAT	5	CTS	10
		SHELL	11



H. Scan Map



I. Reliability

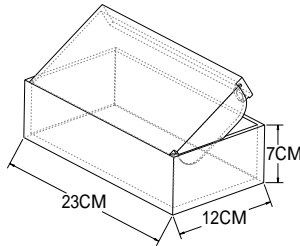
Life Time	
Light Source	40,000 hours
Trigger Switch	300,000 times
MTBF(Calculated)	22,000 hours
Thermal Shock	
High Temp.	60 °C (140 °F)
Low Temp.	-20 °C (-4 °F)
Cycle time	30 minutes for high temp. , 30 minutes for low temp.
Cycles	24 cycles
Cable Bending Test	25,000 times minimum (30 times/min @ 500g/90 °)
Mechanical Shock	40 inch (100 cm) Drop on Concrete Surface



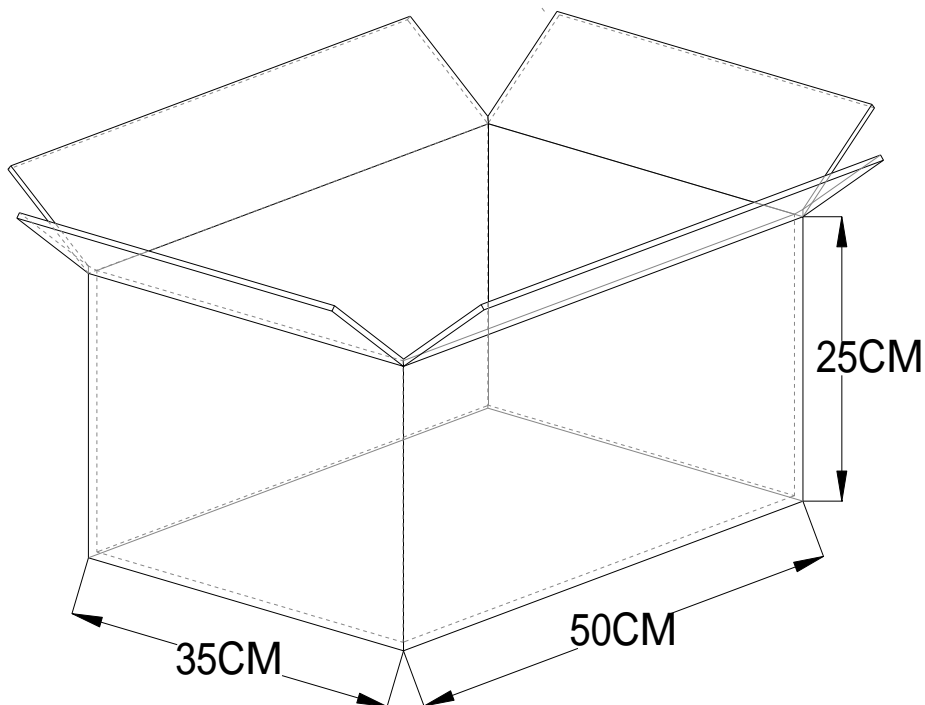
J. Packing

Dimension	
Unit	7 cm X 12cm X 23 cm
Carton	25 cm X 35 cm X 50 cm
Weight	
Unit	250 g
Carton	6 Kg (Q'ty :20 pcs)
Storage	
Temperature	-20 °C to 60 °C (-4 °F to 140 °F)
Humidity	20% to 95% (Non-condensing)

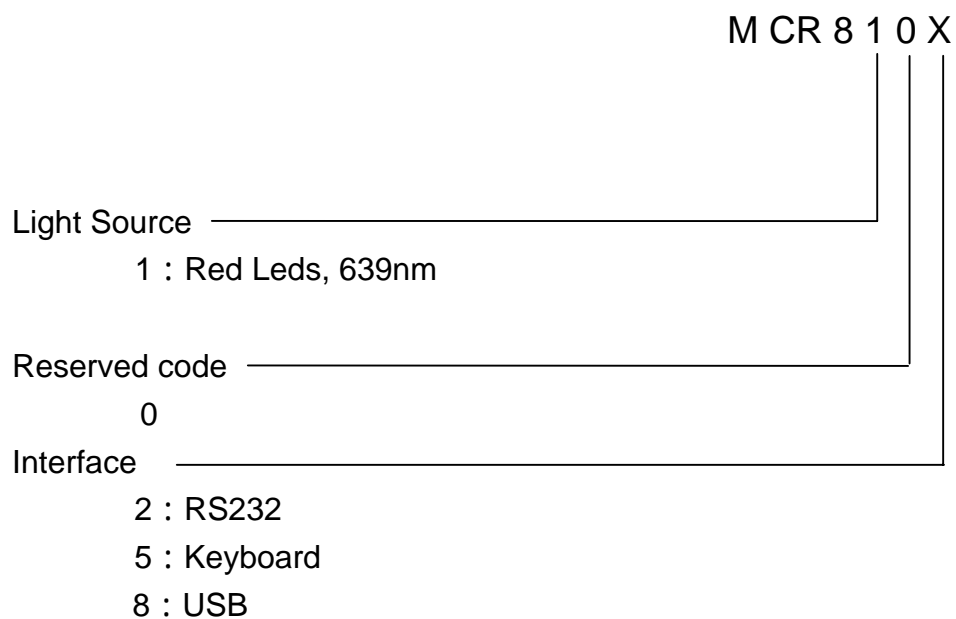
Unit :



Carton :



K. Part Number



Cable P/N :

Interface	Color	Cable P/N:
KB	Black	004MMR/TVS-1
	Gray	004MMR/TVS-2
RS232	Black	004MCR8-102-B
	Gray	004MCR8-102-W
USB	Black	004MCR8-108-B
	Gray	004MCR8-108-W

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