

SPECIFICATION

Customer : _____

Customer's Model No. : _____

Model No. : BR300 Series _____

Date: _____

Sample Serial No. : _____

Spec. Version & Revision Date: V1.3

2011.03.16

Received/Approved by

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Revision History

Version	Date	Context
1.0	2004.04.22	Golden release
1.1	2005.03.01	
1.2	2006.02.16	
1.3	2011.03.16	

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A. General Description

This slot reader module is well designed and constructed with high quality components. It accepts wide range of reading speed and provides very accurate barcode scanning. With different wavelengths, barcodes which are printed on different materials can be easily read to suit the application needs.

The built-in decoder is an advanced and versatile decoding facility for barcoding systems. It works with variety of bar code types and computer interfaces.



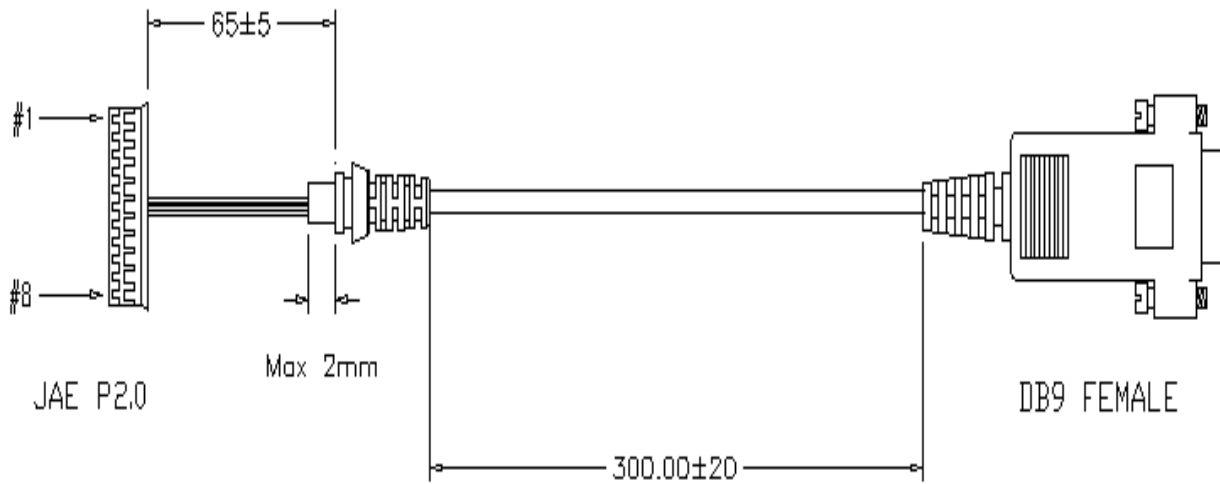
B. Physical Characteristics

Weight	
Body Weight	43.2 g (1.52 oz)
Cable Weight	Approx. 75 g (2.65 oz)
Material	
	PC&ABS
Cable Length	Approx. 300 mm (11.8 inch) / 150 cm (59.06 inch)
Dimension	
	90.0 mm x 29.0 mm x 38.0 mm

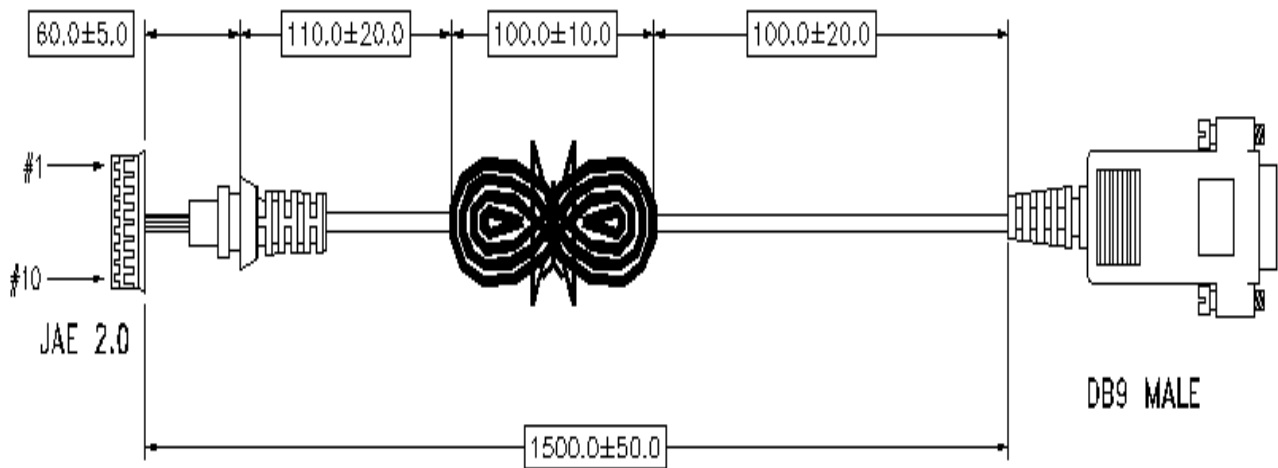
Cable Drawing

Unit : mm

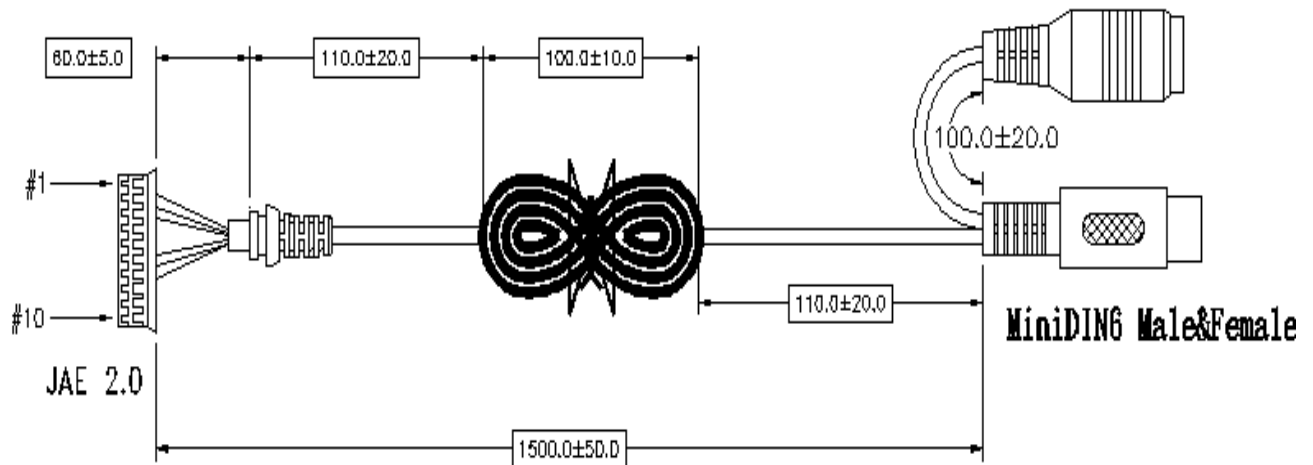
TTL Interface :



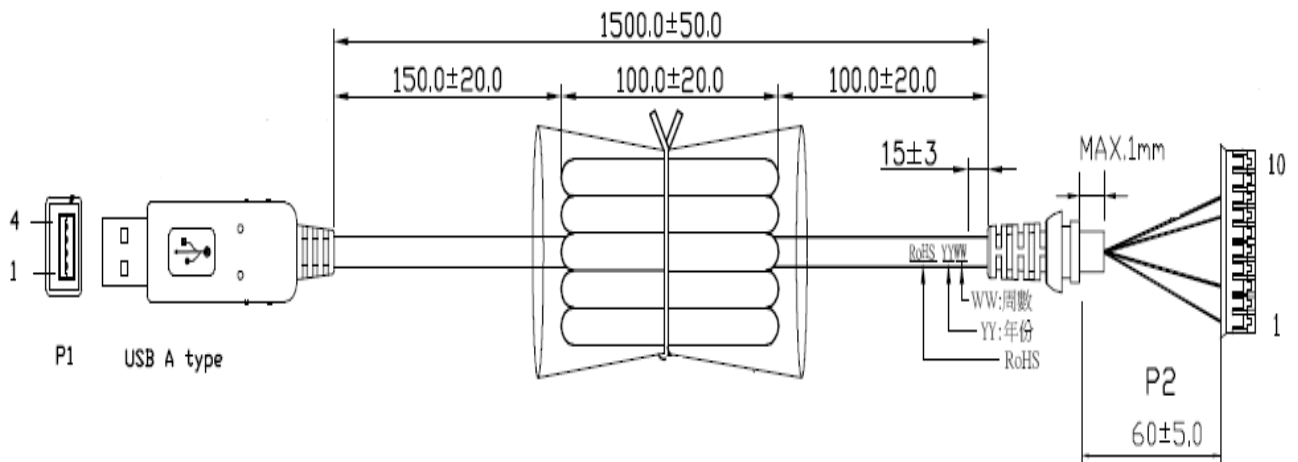
DB9(F)	JAE P2.0	Function
9	1	+5V
1	2	SOS
2	3	DATA
5	5	Trigger
6	6	Power Enable
7	7	GND
8	8	Spiral

RS232 Interface :

JAE P2.0	DB9(F)	Function
1	9	VCC,+5V
4	3	RXD
5	2	TXD
8	5	GND
9	8	RTS
10	7	CTS

Keyboard Interface :

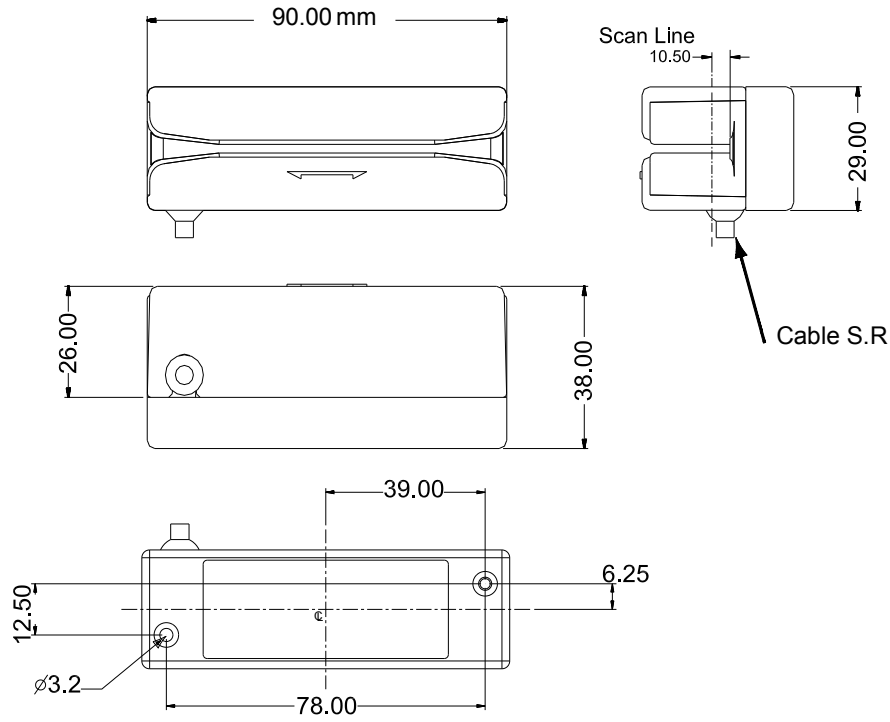
JAE 2.0	Mini DIN6M	Mini DIN6F	Function
1	4	4	VCC
2		5	KB CLK
3	5		HOST CLK
6		1	KB DATA
7	1		HOST DATA
8	3	3	GND

USB Interface :

P1	Function	P2	Function
1	VCC	1	VCC
2	D-	3	Host CLK
3	D+	7	HOST Data
4	GND	8	GND
shielding	shielding	8	shielding

Mechanical Drawing

Unit : mm

**C. Electrical Characteristics****a. BR30X**

Interface	RS232	KB	RS232 TTL Level	ABA
Supply Voltage	DC+5V ±5%			
Output Voltage (Typ.)	±9V	+5V ±5%	+5V ±5%	+5V ±5%
Output low Voltage (Max.)	-	0.4V	0.4V	0.4V
Current Draw	±10%			
Power On (Typ.)	78 mA	60 mA	60 mA	60 mA
Stand by (Typ.)	44 mA	33 mA	35 mA	35 mA
Operation (Typ.)	75 mA	58 mA	58 mA	58 A

b. BR31X

Interface	RS232	KB	RS232 TTL Level	ABA
Supply Voltage	DC+5V ±5%			
Output Voltage (Typ.)	±9V	+5V ±5%	+5V ±5%	+5V ±5%
Output low Voltage (Max.)	-	0.4V	0.4V	0.4V
Current Draw	±10%			
Power On (Typ.)	78 mA	58 mA	58 mA	58 mA
Stand by (Typ.)	43 mA	32 mA	32 mA	32 mA
Operation (Typ.)	75 mA	55 mA	55 mA%	55 mA

D. Performance

	BR30X	BR31X
Light Source	Visible Red light 632nm LED	Infrared ray 940nm
Sensor	Photo Diode	
Scan Rate	100 - 1000 mm / sec (3.9 - 39 inch / sec)	
Resolution	6mil/0.15mm@PCS90%	
Height Scan Line	10.5 mm / 8.5 mm	
Ambient Light	3000 Lux Max.	

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)

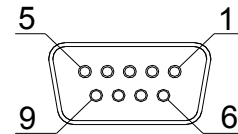
F. Readable Symbologies

	Readable	Default Enable
All UPC/EAN/JAN	V	V
EAN128 Code	V	V
Code 39	V	V
Code 39 Full ASCII	V	
Code 128	V	V
CODABAR/NW7	V	V
Interleave 25	V	V

G. Pin Assignment

(a) TTL Interface(DB 9 Female)

Pin No.	Function
1	S.O.S.
2	DATA
3	N.C.
4	N.C.
5	TRIGGER
6	P. E.
7	GND
8	N.C.
9	+5V

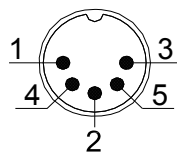


DB 9 Female

(b) Keyboard Interface

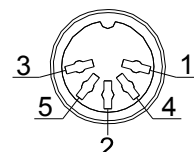
DIN 5 MALE

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



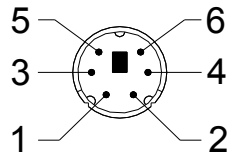
DIN 5 FEMALE

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

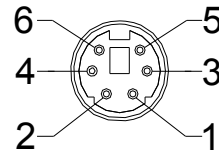


MiniDIN 6 MALE

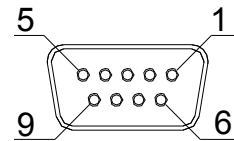
Pin No.	Function
1	HOST DATA
3	GND
4	Vcc(+5V)
5	HOST CLK

**MiniDIN 6 FEMALE**

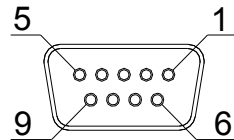
Pin No.	Function
1	KB DATA
3	GND
4	Vcc(+5V)
5	KB CLK

**(c)RS232 Interface****DB9 Female with Power Lead**

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

**DB 9 Female****DB9 Female without Power Lead**

Pin No.	Function
2	TXD
3	RXD
5	GND
7	CTS
8	RTS
9	Vcc (+5V)

**DB 9 Female**

H. Reliability

Life Time

Light Source	40,000 hours
MTBF(Calculated)	26,000 hours

Thermal Shock

High Temp.	60 °C (140 °F)
Low Temp.	-20 °C (-4 °F)
Cycle time	20 minutes for high temp. , 20 minutes for low temp.
Cycles	5 cycles

Cable Bending Test 25,000 times minimum (30 times/min @ 500g/90 °)

Mechanical Shock 40 inch (100 cm) Drop on Concrete Surface

I. Part Number

