

# SPECIFICATION

Customer : \_\_\_\_\_

Customer's Model No. : \_\_\_\_\_

Model No. : WD300 Series \_\_\_\_\_

Date : \_\_\_\_\_

Sample Serial No. : \_\_\_\_\_

Spec. Version & Revision Date:    V01    2006.03.31 \_\_\_\_\_

Received/Approved by



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**Revision History**

Version	Date	Context
V00	2004.04.22	Golden release
V01	2006.03.31	

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## A. General Description

This wand is a portable hand-held barcode reader that is specially designed to provide the best scanning result. Much of attention is focus on the high quality optical module as well as the efficient electronic circuits to minimize the power consumption.

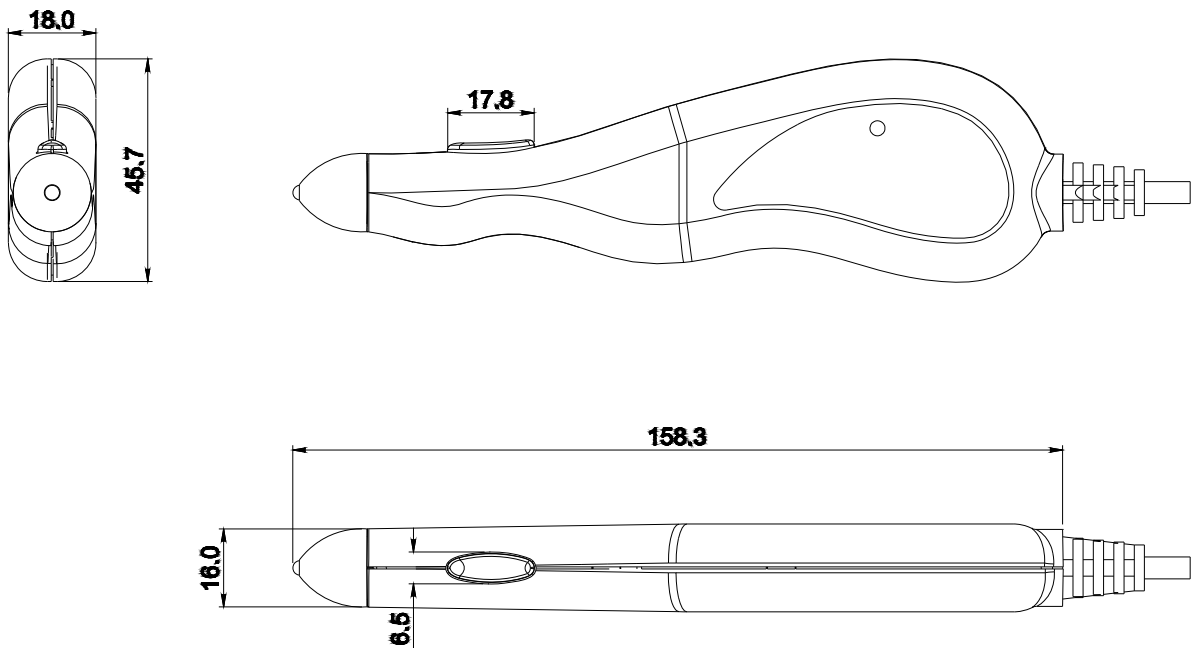
Since current drawn is reduced, it is very suitable for portable or battery operated environment where run time is a very important issue. With different wavelengths, barcodes which are printed on different materials can be easily read to suit the application needs. The high resolution model guarantees the best first read rate for high density codes in the industry.



## B. Physical Characteristics

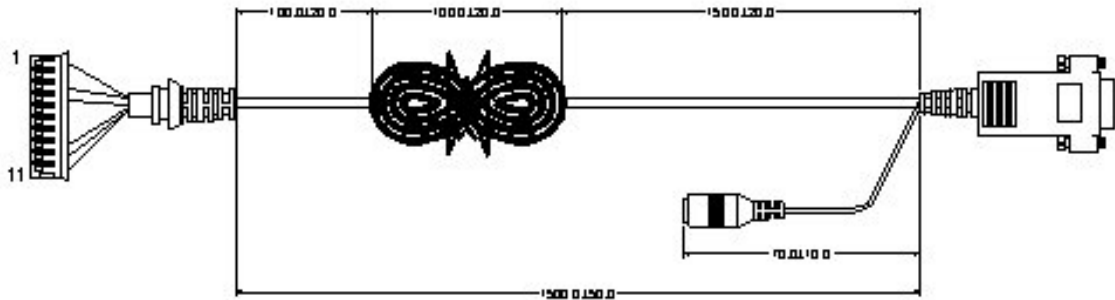
<b>Weight</b>	
Body weight	Approx. 1.76 oz ( 50 gm )
Cable weight	Approx. 2.65 oz ( 75 gm )
<b>Material</b>	
	ABS
Cable Length	5.9 FT. ( 180cm )
<b>Connector</b>	
	JAE 10P Pitch 2.0
Dimension	158.30 mm X 16.00 mm X 45.70 mm

### a) Mechanical drawing

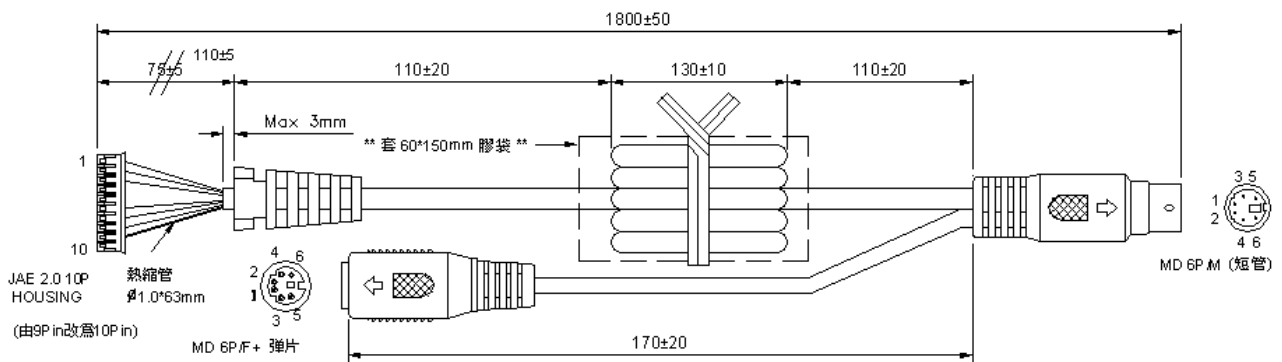


**b) Cable**

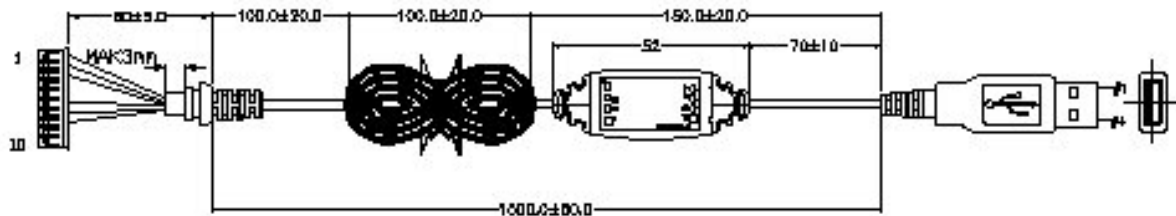
**(1) RS232**



**(2) Keyboard**



**(3) USB**



## C. Electrical Characteristics

Interface	RS232	RS232 TTL Level	TTL	KB	USB
Supply Voltage	DC +5V $\pm 5\%$				
Output Voltage (Typ.)	$\pm 9V$	+5V $\pm 5\%$	+5V $\pm 5\%$	+5V $\pm 5\%$	+5V $\pm 5\%$
Output low Voltage (Max.)	-	0.4V	0.7V	0.4V	0.4V
Current Draw	$\pm 10\%$				
Power On (Typ.)	55mA	35mA	35mA	35mA	45mA
Stand by (Typ.)	30mA	15mA	15mA	15mA	25mA
Operation (Typ.)	65mA	50mA	50mA	50mA	60mA

## D. Performance

	WD30X-X	WD31X-X
Light Source	Visible Red light 660nm LED	infrared light 940nm
Sensor		Photo Diode
Scan Rate		50 - 500 mm / sec
Depth of Field		Contact Type
Resolution		5mil/0.127mm@PCS90%
Scanning Angle		$\pm 35^\circ (\pm 5^\circ)$
Ambient Light		1500 Lux Max. ( Sunlight )

## 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

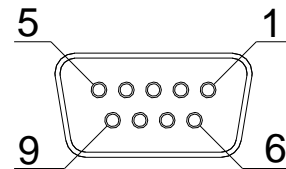
	Readable	Default Enable
All UPC/EAN/JAN	V	V
EAN128 Code	V	V
Code 39	V	V
Code 39 Full ASCII	V	
Code 128	V	V
CODABAR/NW7	V	V
Interleave 25	V	V

## G. Pin Assignment

### a) RS-232 Interface

#### DB 9 Female

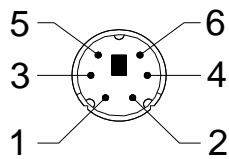
Pin No.	Function
2	TXD
3	RXD
5	GND
7	CTS
8	RTS
9	Vcc/+5V
Power Lead	Vcc/+5V



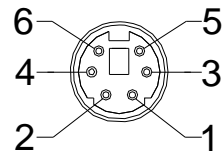


**b) Keyboard Interface****MiniDIN 6 MALE**

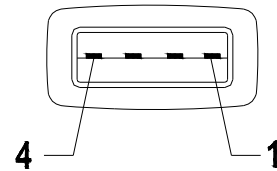
Pin No.	Function
1	HOST DATA
3	GND
4	Vcc(+5V)
5	HOST CLK

**MiniDIN 6 FEMALE**

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

**c) USB Interface****USB A Type Male**

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



## H. Reliability

### Life Time

Light Source	40,000 hours
Trigger Switch	1,000,000 times
MTBF(Calculated)	80,000 hours

### Thermal Shock

High Temp.	70 °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. Packing

### Dimension

Unit	17.4 cm x 11.7 cm x 6 cm
Carton	49cm x 34 cm x 26 cm

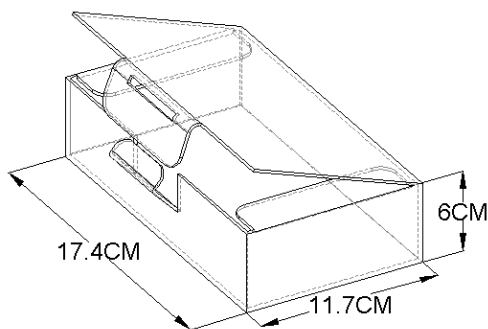
### Weight

Unit	215g
Carton	5.3 Kg ( Q'ty :20 pcs )

### Storage

Temperature	-20 °C to 70 °C (-4 °F to 140 °F)
Humidity	20% to 95% (Non-condensing)

**Unit :**



**Carton :**

