

# SPECIFICATIONS

|                   |                          |
|-------------------|--------------------------|
| Customer          |                          |
| Attention         |                          |
| Your Model No.    |                          |
| TYSSO Model No.   | CD-620 / FCCD-620 Series |
| Date              | Sept.21,2004             |
| Sample Serial No. |                          |

RECEIPT STATUS

RECEIVED

Date \_\_\_\_\_

Signature \_\_\_\_\_

Title



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## A. General

This CCD Bar Code scanner module is well designed with high quality components. The improved digitizer provides very accurate barcode scanning signal to decoders. With different scanning ranges, It's ideal to meet the application requirement. Because it has the compact and small dimensions, integrating this module to most of housings is a easy job. It simplifies the development process and can save developing time. The TTL output allows the scanner module to be universally accepted by most decoders.

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

- ★ Compact Size  
Convenient fit in most of housing
- ★ Single 5 Volts Power Supply  
Simplified connection to one input power source
- ★ TTL Signal Output (TTL version)  
Standard signaling for connecting to most decoders
- ★ Low Distortion in TTL Signal Output  
Easy to decode with most decoders

## B. Models

### **CD-620 [ ] (Without Housing)**

**Interface** \_\_\_\_\_

T : TTL

R : RS232

K : Keyboard

### **FCCD-620 [ ] (With Housing)**

**Interface** \_\_\_\_\_

R : RS232

K : Keyboard

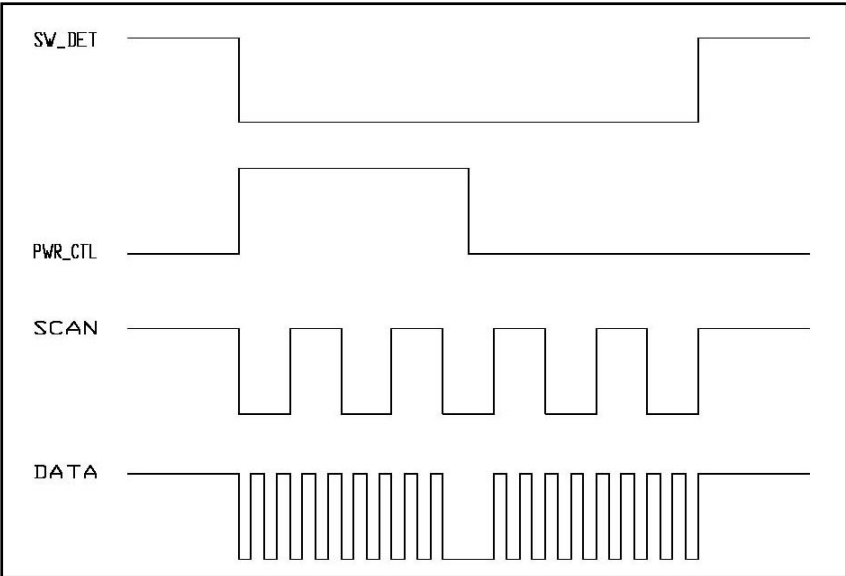
### C. Optical Characteristic

|                |  |
|----------------|--|
| Light Source   | 660nm                                  |
| Sensor         | CCD Sensor with 2048 pixels            |
| PCS            | Up to 0.45                             |
| Scan Rate      | 100 scans / sec.                       |
| Ambient Light  | 2000 Lux max. (Fluorescent)            |
| Depth of Field | 4" (100mm) for 20 mil (0.50mm) barcode |
| Resolution     | 4 mil (0.1mm)                          |

### D. Electrical Characteristics

|  |  |
|--|--|
| Supply Voltage   | DC +5V $\pm$ 5%  |
| Output Voltage (Typ.)                                    | +5V  |
| Output Voltage (Min.)                                    | 4.5V   |
| Logic High   | Space/Bar (Optional)   |
| Logic Low  | Bar/Space (Optional)   |
| Power Consumption<br>Stand by (Max.)<br>Operation (Max.) | 30mA for TTL model, 40mA for Decoded model<br>90mA for TTL model, 40mA for Decoded model |
| Power Enable Control                                     | Active High  |

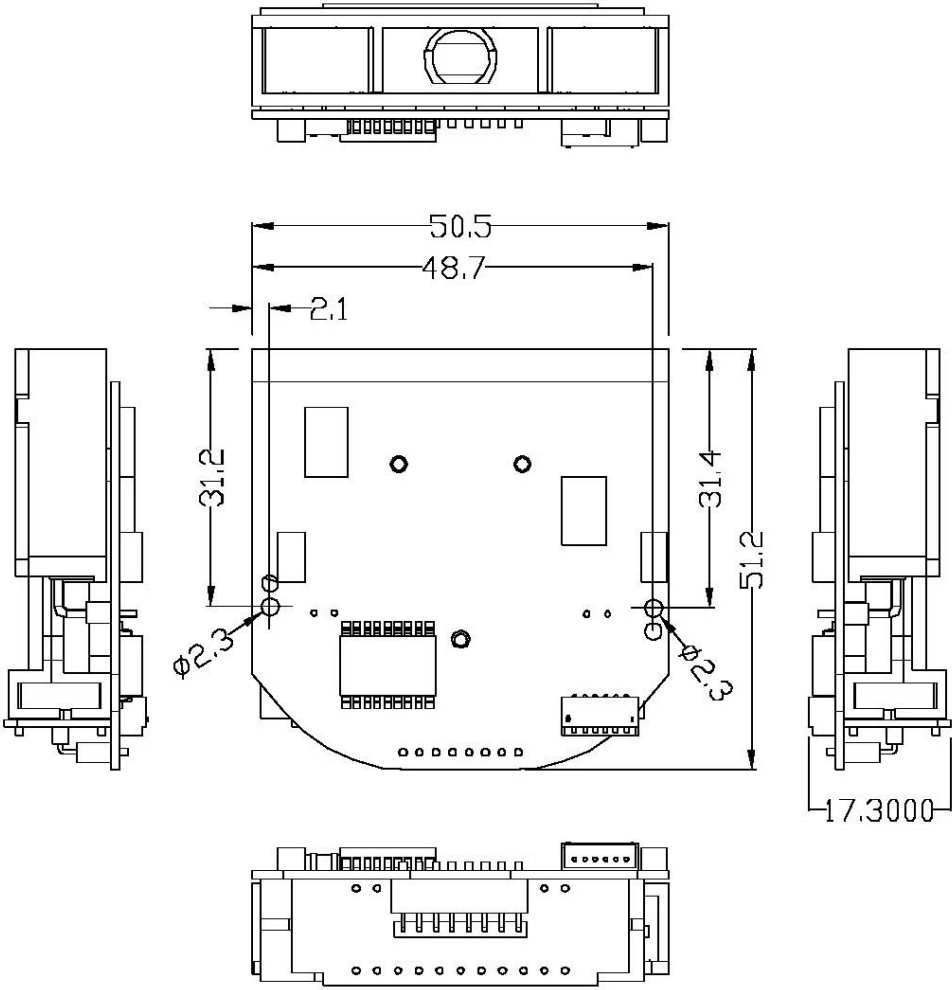
#### Timing Diagram



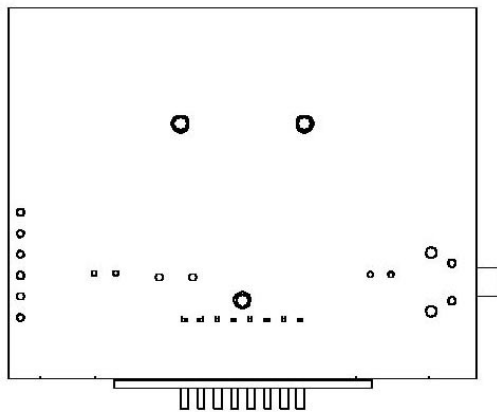
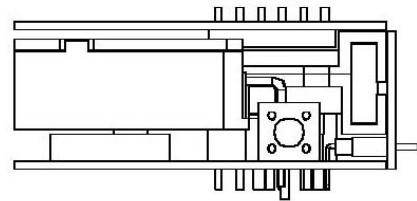
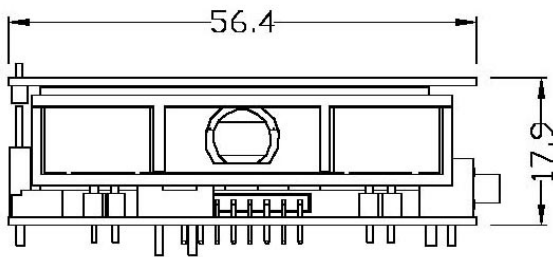
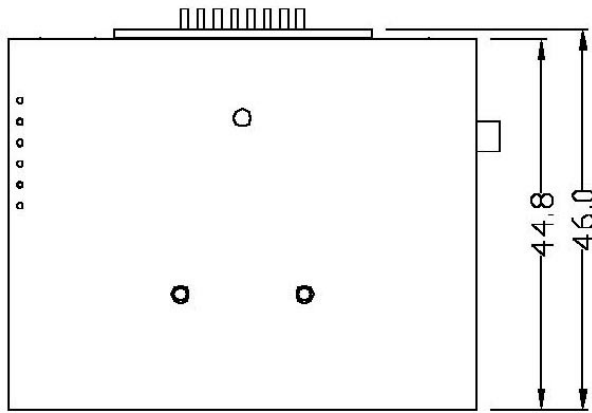
# E. Physical Characteristics

Weight: 24g for TTL model and 33g for decoded model  
Material: PC + Fiber  
Dimension: Unit:mm

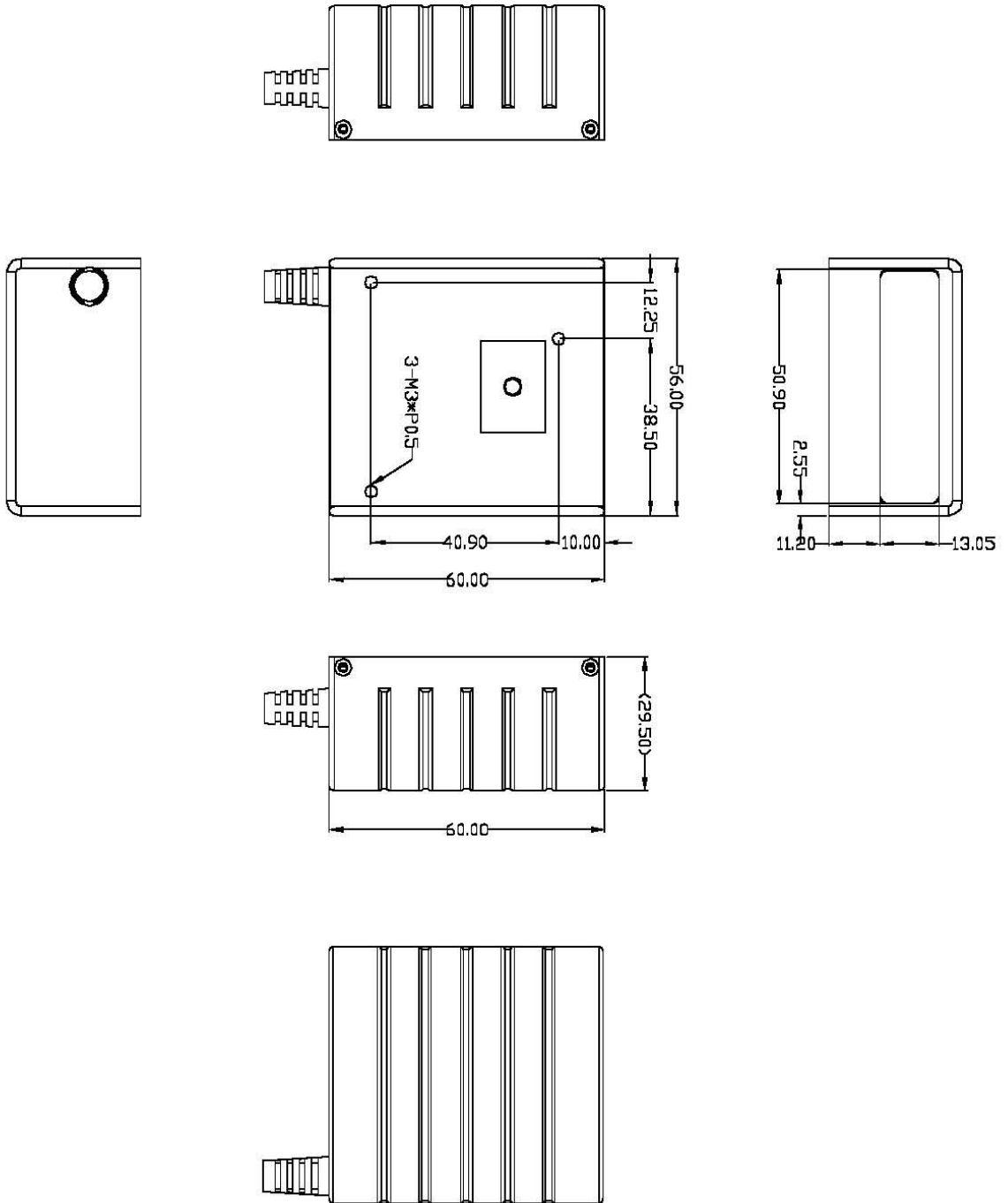
## 1. TTL Model: CD-620



2. Decoded Model: FCCD-620 without Housing



### 3. Decoded Model: FCCD-620 with Housing



## F. Environment

For all models

|                       |                                  |
|-----------------------|----------------------------------|
| Operating Temperature | 0°C to 45°C                      |
| Storage Temperature   | -20°C to 60°C                    |
| Relative Humidity     | 20% to 85% (Non-condensing)      |
| Shock                 | 1 meter drop on Concrete Surface |

## G. Performance

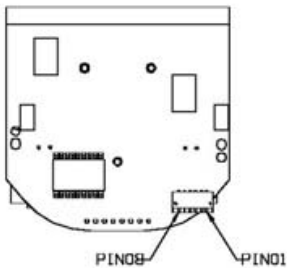
|                |   |
|----------------|---|
| Scan Rate      | 100 scans / sec (signal directional)      |
| Width of Field | 47.5 mm + 0.59 × (Distance to CD-610 ) mm |
| Depth of Field | 4 inch (100mm)                            |
| Resolution     | 4mil (0.1mm)                              |
| PCS            | PCS 0.45                                  |
| Reading Angle  | Test Conditions: Code 39, 10mil, PCS0.9   |
| Forward        | ± 30 Degree                               |
| Up & Down      | ± 45 Degree                               |
| Left & Right   | ± 40 Degree                               |
| Dead Zone      | Up & Down 8 Degree                        |

## H. Pin Assignment

### 1. TTL-PCB Connector Type: JST Pitch 1.25mm 6Pins Connector

TTL Data Output Connector

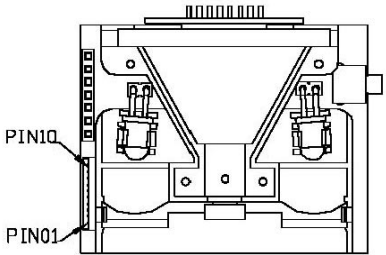
| Pin No. | Function     |
|---------|--------------|
| 1       | Vcc (+5V)    |
| 2       | Power Enable |
| 3       | Trigger      |
| 4       | TTL Data     |
| 5       | Star of Scan |
| 6       | GND          |



### 2. Decoded PCB Connector Type: JST Pitch 1.25mm 10 Pins connector

Decoder PCB Data Output Connector

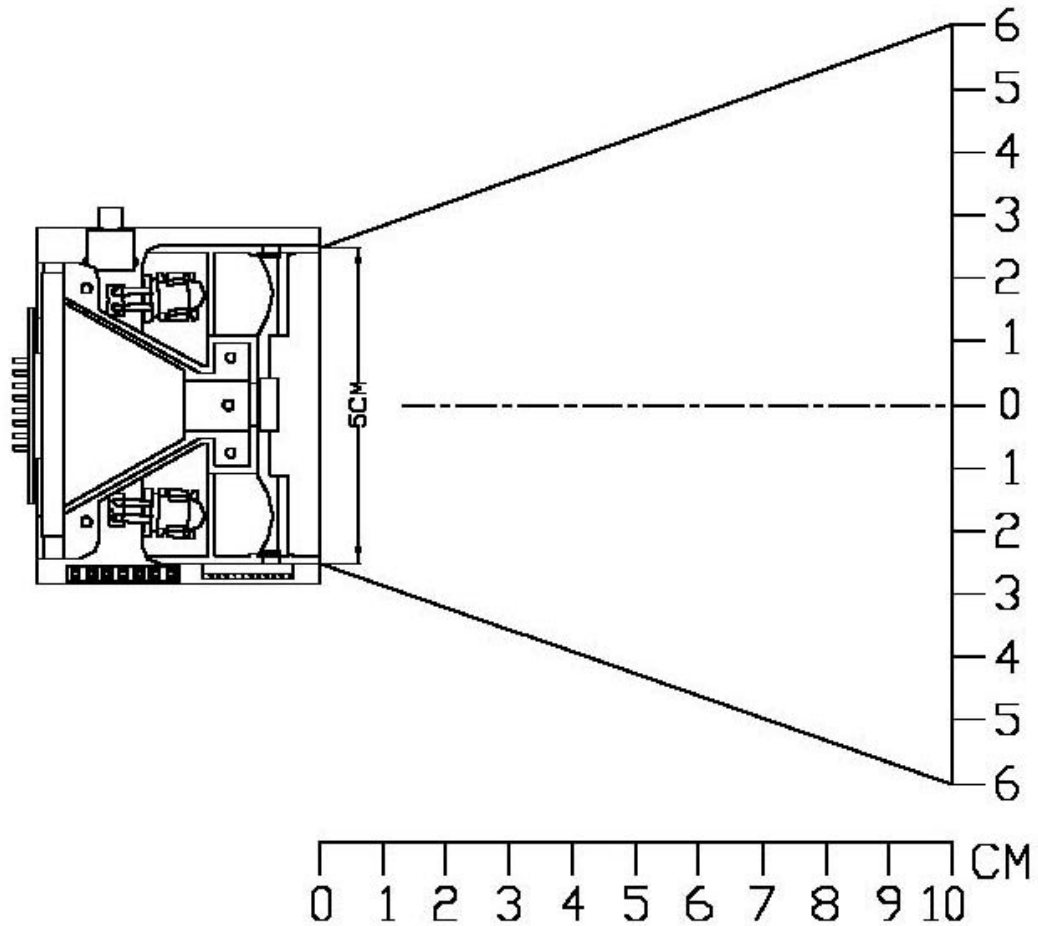
| Pin No. | Function |
|---------|----------|
| 1       | RTS      |
| 2       | CTS      |
| 3       | TXD      |
| 4       | GND      |
| 5       | PCDATA   |
| 6       | PCCLK1   |
| 7       | VCE      |
| 8       | KBCLK    |
| 9       | KBDATA   |
| 10      | RXD      |





# I. Decode Zone

Test Conditions: Code 39, PCS 0.9



|        |               |
|--------|---------------|
| 3~6CM  | 4mil(0.1mm)   |
| 3~6CM  | 5mil(0.127mm) |
| 3~8CM  | 6mil(0.15mm)  |
| 2~9CM  | 10mil(0.25mm) |
| 2~10CM | 13mil(0.33mm) |
| 2~10CM | 20mil(0.6mm)  |

## **J. Decoded symbologies;**

Code 39, Code 32, Interleaved 2 of 5, Industrial 2 of 5, IATA , Matrix 2 of 5, China postage, Code 128, Code 11, Code 93, MSI-PLESSY, Codebar/NW7, Code 4, EAN-13/JAN-13, UPC-A, EAN-8/JAN-8, ISBN/ISSN

## **K. Scan mode: Trigger modes, Continuous modes**

## **L. Programming: By user's manual or by software via RS-232 or keyboard**

## **M. Host control: By providing trigger commands**

## **N. Support Remote programming by Computer Host via Serial Cable**