1D Scan Engine

DE1200 Specification

*Company: DongGuan DYscan Technology Co., Ltd
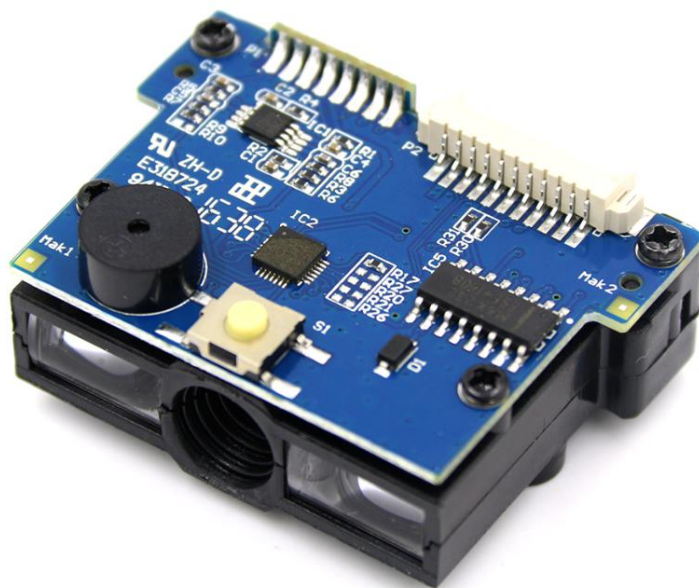
*Web: www.dyscan.com

*Tel: 86-755-21032537

*Add: 21st floor, Longsheng Times Building, Industrial Road, Longhua District, Shenzhen, 518000, China

Table of Contents

www.dyscan.com

Product Description

DE1200 is a practical embedded barcode scanner module with leading CCD image recognition technology and intelligent image recognition system. It can scan universal 1D codes, support USB,TTL-RS232,PS2 multiple interfaces, read the paper, goods, screens, other media barcodes. Widely used in manufacturing, warehouse, logistics, health care, retail chain, mobile payment, express delivery, inventory management, food traceability, asset inventory, etc.

Features

☆ Simple structure, widely used in lockers, self-service machines.

☆ Read all mainstream 1D barcodes in the market easily.

☆ High-performance processor, fast decoding. (3mil)

☆ Interface: USB, TTL, RS232, PS2.

☆ Support multiple systems and languages, secondary development, customization.

☆ Widely used in various types of SCM, locker, self-service equipment etc.

Application

■ Lockers

■ Medical research

■ Lottery machines

■ Queuing calling equipment

■ Microcontroller development

■ Mobile coupons, tickets

■ Mobile payment barcode scanning

■ Self-service terminals

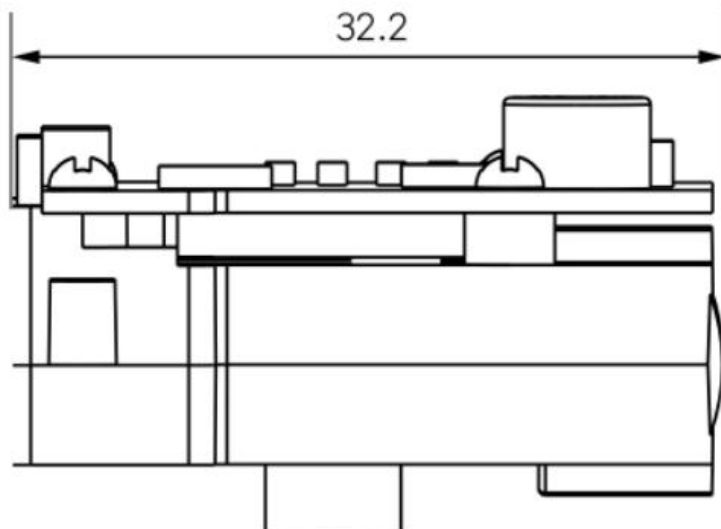■ Self-service vending machines

Mounting

The illustrations below show the mechanical mounting dimensions for the DE1200. The structural design should leave some space between components.
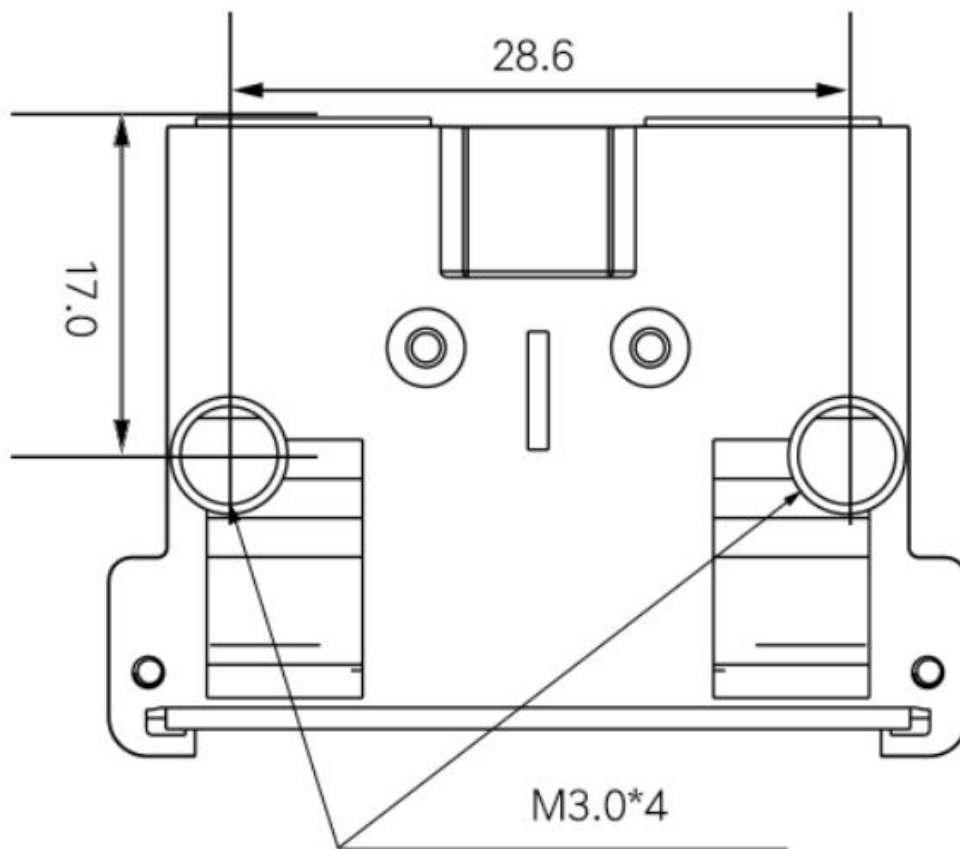
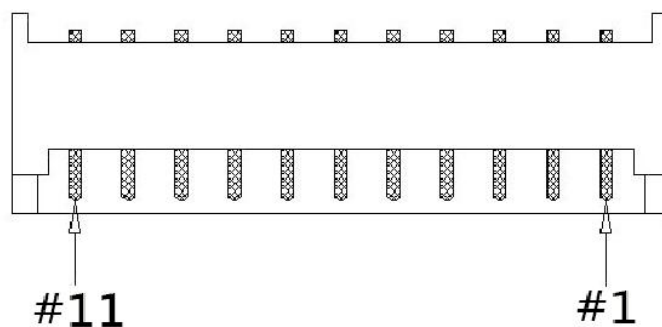**Front View (unit : mm)**
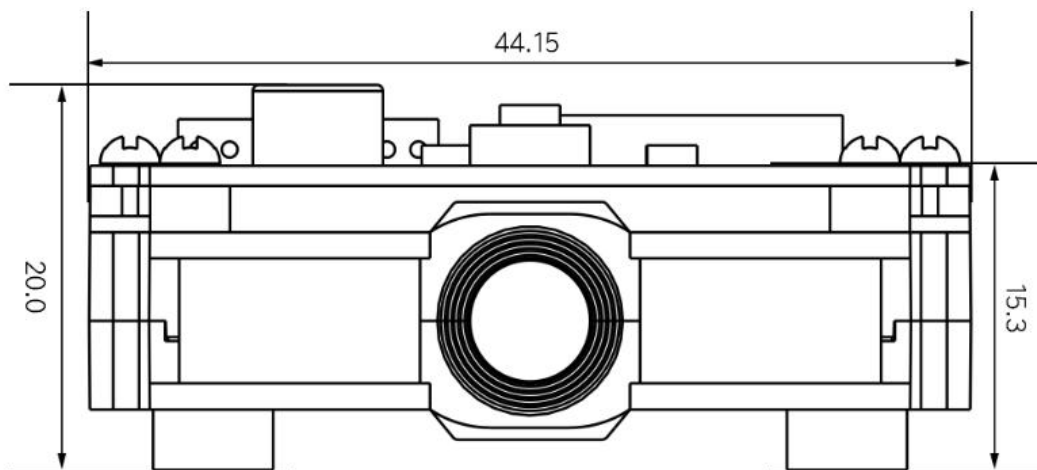
Side View (unit : mm)

Top View (unit : mm)

28.6

17.0

M3.0*4

Host Interface Connector

The following table lists the pin functions of the 11pin pitch 1.25host interface connector on the DE1200

PIN#	Signal	Type	Definition
1	GND	P	Ground
2	VCC	P	DC 5V Current source
3	TX/D+	Output	TTL transmission /USB_D+
4	RX/ D-	Input	TTL transmission /USB_D-
5	HOST DATA	Input/Output	PS2_HOST DATA
6	HOST CLK	Input/Output	PS2_HOST CLK
7	KB DATA	Input/Output	PS2_KB DATA
8	KB CLK	Input/Output	PS2_KB CLK
9	RTS	-	
10	CTS	-	
11	SHIELD	-	Shield

www.dyscan.com

Cable Interface

DE1200 scanner must be connected with terminals, PC host, POS and Android host etc.

USB

Pin No.	Function
1	Vcc
2	D-
3	D+
4	GND
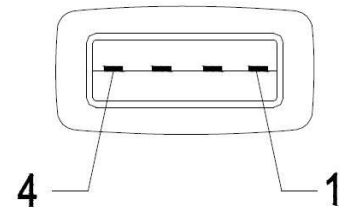
TTL/RS232

Pin No.	Function
2	TXD
3	RXD
5	GND
9	Vcc/+5V
Power Lead	Vcc/+5V
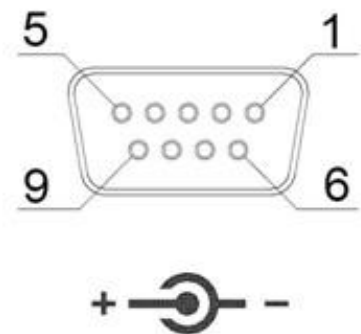
PS2

Mini DIN HOST MALE

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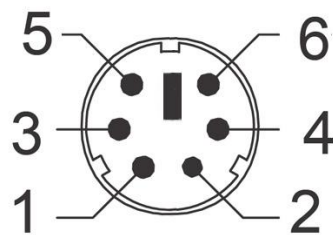
Mini DIN KB FEMALE

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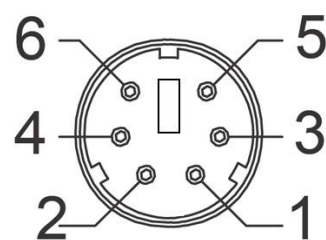
Performance

Scan Type	Linear CCD
Light Source	Visible red light, 625±10nm
CPU	32-bit
Resolution	2500
Reading precision	≥3mil/0.076mm(PCS90%,Code 39)
Decoding speed	300times/s
Depth of field	30mm-700mm
Scan Mode	Manual ,Continuous, Auto Sense, Fashing
Scan angle	*Test Conditions：CODE39,10mil/0.25mm,PCS90%*
	Pitch:±60°
	Roll: ±30°
	Skew: ±60°
Print Contrast Signal	≥20%
Ambient Light	Dark environment, indoor natural light
Symbologies	UPC-A ,UPC-E ,EAN-8 ,EAN-13 ,ISSN ,ISBN ,Code 128， GS1-128 , ISBT 128， Code 39 ,Code 93 ,Code 11， Interleaved 2 of 5 ,Matrix 2 of 5 ,Industrial 2 of 5 ,Standard 2 of 5（IATA）,Codabar（NW-7）, Plessey， MSI Plessey， RSS， China Post，etc.

Physical Parameter

Weight	<16g
Dimension	32.2mm L * 44.15mm W * 20.0mm H
Communication	USB（USB-KBW/USB-COM）、TTL、RS232、PS2
Interface Type	11pin pitch 1.25
Power Supply	DC 5V@100mA（Work），30mA（Standby）

Environmental

Operating	-20℃ to 50℃
Storage	-40℃ to 70℃
Humidity	5% to 95%（non-condensing）
Drop Height	1.2 m
Temp. Test	30 minutes for high Temp., 30 minutes for low Temp.,
High Temp	60℃
Low Temp	-20℃
Transport	10H@125RPM

Accessories List

Cable（Optional）	USB Cable, used to connect the DE1200 to a host device.
	RS232 Cable, used to connect the DE1200 to a host device, with USB
	PS2 Cable, used to connect the DE1200 to a host device and
Power Adaptor	Output: DC5V 1A, input: AC100~240V 50~60Hz(serial port optional).

Depth of field

Barcode	Precision	near	far
Code 39	0.076(3mil)	80mm	120mm
Code 39	0.1mm(4mil)	70mm	140mm
Code 39	0.127mm(5.0mil)	60mm	150mm
Code 39	0.5mm(20mil)	30mm	450mm
Code 39	1.0mm(40mil)	130mm	700mm
EAN-13	0.33mm(13.0mil)	30mm	320mm

Test Condition : T=25℃ , Illumination=200LUX , PCS=0.9

www.dyscan.com