MIR3D

High Performance Cost-Effective Area Imager Barcode Scanning Module

SCANTECH ID®
CHAMPTEK Group

Introduction

The MIR3D is a high performance, omni-directional area imager barcode scanning module. It drivers the high-quality when your products need to capture 1D and 2D bar codes, its good ability to read bar codes that are printed on paper labels or displayed on the screen of a mobile phone or computer; and the rapid scanning speed that protects worker productivity and customer experience. With the MIR3D, you can create products that will make a difference for your customers – and their customers. It is designed for various built-in OEM solutions, such as self-service kiosks, POS(Point-of-Sales) terminals, ATM and mobile device solutions etc.

Numerous features make it easy to integrate the MIR3D ,from two mounting areas options, keep imager on PCB board or standalone with a FPC to connect with board, and through documentation to a scan engine development board. With a multitude of software configuration through Idea set utility, you can easily optimize the performance of the MIR3D for your application.

MIR3D module is a high performance area imager scanner, provides customers with the most cost-effective solution in the market and perfectly suitable and definitely the best choice for any OEM and built-in application.
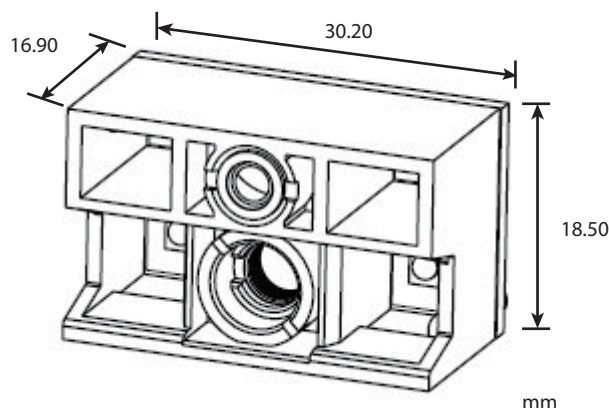
Features

- Omni-directional scan pattern, no need to align barcode and scanner, ensuring user comfort and protecting worker productivity.
- Easily integrated with various OEM application while 1D and 2D barcode scanning.
- Focused Green-coloured crisp square 'spot' for accurate aiming and first time barcode capture.

- Flexible mounting options, either mounting on external or inner screw holes.
- With a multitude of software configuration options, you can easily optimize the performance of the MIR3D for your application.

MIR3D

Reading Range

Barcode mil	Depth of field
4mil Code39	60~100 mm
20mil Code39	60~200 mm
20mil QRCode	70~150 mm
20mil PDF417	70~150 mm
20mil Data Matrix	70~130 mm

16.90   30.20   18.50   mm

Specifications

● Physical Characteristics
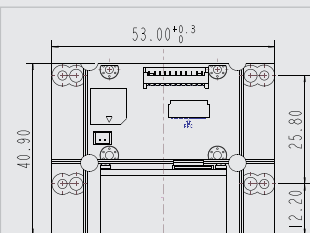
Weight

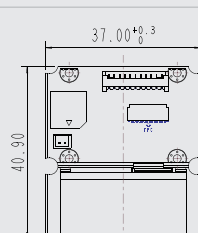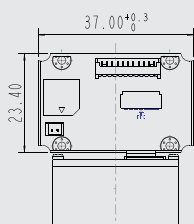|	
Body weight	Approx. 0.67 oz (19.2g)
USB Cable weight	Approx. 1.79 oz (51g)
RS232 Cable weight	Approx. 2.32 oz (66g)
Material	Polycarbonate

Dimension

A1
53.00mm W x 40.90mm D x 15.20 mm H
(Wide board with three mounting areas and connected by molex cable. The engine is mounted on the board.)
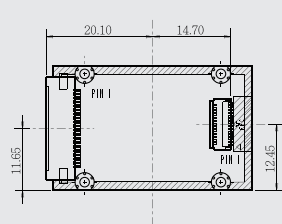
A2
37.00 mm W x 40.90 mm D x 15.20 mm H
(Wide board with one mounting area and connected by molex cable. The engine is mounted on the board.)

A3
37.00 mm W x 40.90 mm D x 12.00 mm H
(Narrow board with one mounting area and connected by molex cable. The engine is separated.)

D
38.85 mm W x 23.50 mm x 5.20 mm H
(Narrow board with one mounting area and connected by FPC. The engine is separated.)

● Electrical Characteristics

Interface	RS232	USB-HID(or Virtual COM port)
	DC Adaptor	USB Power
Supply Voltage	DC+5V±5%	DC+5V±5%
Current Draw	±10%	±10%
Stand by (Typ.)	180mA	180mA
Operation (Typ.)	380mA	380mA

● Environmental

Operating Temp.	0°C to 50°C (32°F to 122°F)
Storage Temp.	-20°C to 70°C (-4°F to 158°F)
Relative Humidity	20% to 95% (Non-condensing)
Ambient Light	Works in any lighting conditions from 0 to 100,000 lux

● Performance

Light Source	White Light LED
Scan Rate	60 images per second
Sensor Resolution	752 (H) x 480 (V) pixels
Field of View	Horizontal -40°, Vertical -25°
Pitch Angle	5°~60°(±5°)
Skew Tolerance	5°~60°(±5°)
Roll	360°
Indicator	Good read beep

● Reliability

Life Time

MTBF(Calculated)	50,000 hours

Thermal Shock

Low Temp.	-20°C (-4°F)
Cycle time	30 minutes for high temp., 30 minutes for low temp.
Cycles	24 cycles
Mechanical Shock	2000G,0.7ms,half sinus,3axes'
Vibration	8G r.m.s,from 10 to 500Hz,2 hours per axis, 3 axes

● Readable Symbologies

1D Symbologies
UPC-A,UPC-E,EAN-8/JAN-8,EAN-13/JAN-13,Code 39,Code 128,
Interleaved 25,Industrial 25,Matrix 25,Codabar/NW7,
Code 93,China Post,MSI/Plessey,Telepen,GS1 Databar Omni-directional,
GS1 Databar Limited,GS1 Databar Expended

2D Symbologies
Data Matrix,PDF 417,QR Code
Option :
Aztec,Micro PDF 417,Micro QR Code,Han Xin Code,GM Code

Due to Champtek's / Scantech ID's continuing product improvement programs, specifications and features are subject to change