

MIR4D High Performance Cost-Effective Area Barcode Scanning Module



# Introduction

The MIR4D module is a high performance, omni-directional area imager barcode scanner. It drivers the same 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 the customer experience.

With the MIR4D, you can create products that will make a difference for your customers – and their customers. It is designed for various built-in and OEM solutions, such as self-service kiosks, POS(Point-of-Sales) terminals, ATM, price checkers, healthcare and mobile device solutions, etc.

Numerous features make it easy to integrate the MIR4D in customer's application, you can keep imager on decoder board with two mounting areas options to mount it on customer's equipment, or have the imager stand alone to connect with decoder board by a FPC cable. With a multitude of software configuration through IdeaSet utility, you can easily optimize the performance of the MIR4D for your application.

MIR4D module is a high performance area imager scanner, provides customers with the most cost-effective solution in the market and is 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 red-coloured bar aimer 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 your application.

# **MIR4D**

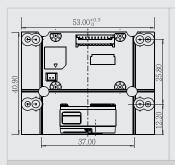
# **Reading Range**

Barcode mil	Depth of field
3mil Code39 4mil Code39 10mil Code39 20mil Code39 20mil QRCode	60~80 mm 40~80 mm 40~110 mm 50~180 mm 40~100 mm
20mil PDF417	40~110 mm

# Specifications

• Physical Characteristics

Weight	
Body weight	Approx. 0.098 oz (2.8g)
USB Cable weight	Approx. 2.1 oz (34.6g)
RS232 Cable weight	Approx. 1.74 oz (49.6g)
Material	Polycarbonate
Dimension	





A2

37.00 mm W x 40.90 mm D x 15.20 mm H  $\,$ 

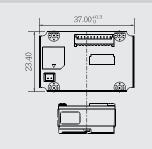
(Wide board with one mounting area and connected by molex cable. The engine is mounted on the board.)

14.70

20.10

M . PIN I

**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.)

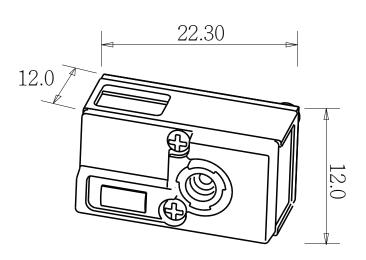


A3 37.00 mm W x 40.90 mm D x 12.00 mm H (Narrow board with one mounting area and connected by molex cable. The engine is separated.)

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 LED
Scan Rate	60 images per second
Sensor Resolution	752(H) x 480(V) pixels (full resolution)
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	
High Temp.	60°C (140°F)
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



# SCANTECH ID

www.scantech-id.com

#### СНАМРТЕК

5/F, No.2, Alley 2, Shih-Wei Lane, Chung-Cheng Rd., Xindian Dist., New Taipei City 231, Taiwan TEL: +886-2-2219-2385 FAX: +886-2-2219-2387

www.champtek.com