

# GMA6165-U Smart Scan Module

GMA6165-U supports USB and TTL232 interfaces, with optional customization for RS232S to meet diverse integration needs. Specially tuned for screen barcode recognition, it excels in reading codes from low-brightness displays, screens with protective films, and high-density data barcodes, while also maintaining excellent performance with printed codes. It adopts standard dimensions and mounting hole positions, fully compatible with mainstream products on the market, simplifying integration and reducing deployment costs. It is widely applicable in turnstiles, access control systems, parcel lockers, ticket validators, kiosks, and various self-service terminals, making it an ideal solution for efficient and reliable barcode scanning.

## FEATURES

### • Strip Fill Illumination

GMA6165-U features a strip illumination, which provides uniform lighting and less glare, offering better user experience. It maintains stable performance even in low light or complex lighting conditions.

### • Dimension and Mounting Holes Align with Mainstream Standards

The size and mounting hole positions of GMA6165-U strictly comply with industry standards, enabling seamless compatibility with existing equipment, cabinets, and brackets without customization.

### • Paper and Screen Code Reading Available

GMA6165-U accurately reads paper and on-screen QR codes, with optimized performance for complex scenarios like low light, obstructions, or screen films.



## PERFORMANCE CHARACTERISTICS

Optical Resolution	640*480 CMOS
Illumination	White LED
Readability	≥5mil
Field of View	Horizontal 68°, Virtual 54°
Screw, Pitch, Roll	Skew tolerance: ±55° from normal Pitch tolerance: ±55° from normal Roll tolerance: 360° from normal
Supported Symbologies	1D: Code 128(ISBT 128, AIM128, GS1 128), EAN-13, EAN-8, UPC-E, UPC-A, ISBN, ISSN, Codell, Intereaved 2 of 5, Code39, Code93, Code32, Codabar, Matrix 2 of 5, Industrial25, IATA25, MSI Plessey, GS1 Databar, Plessey, Febraban 2D: Maxicode, Datamatrix, Micro QR Code, PDF417, Micro PDF417, DotCode, QR Code, Aztec, Hanxin Code, Composite

## PHYSICAL PARAMETER

Dimension	61 x 64.8 x 23.1mm
Notification	Beeper
Operation Voltage	5V ±5%
Standby Current	140mA
Interfaces	USB(HID-KBW, VCP), TTL232, customized RS232 supported

## USER ENVIRONMENT

Ambient Light	0 - 100, 000Lux
Operating Temperature	-20°C~55°C
Storage Temperature	-40°C~70°C
Humidity	5%~95% non-condensing
LED Safty Grade	CE, FCC, RoHS, IEC62471

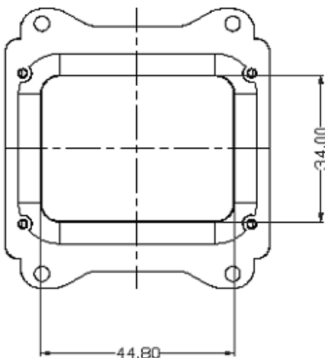
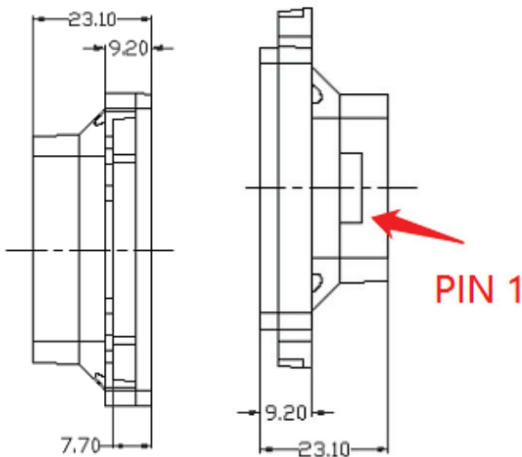
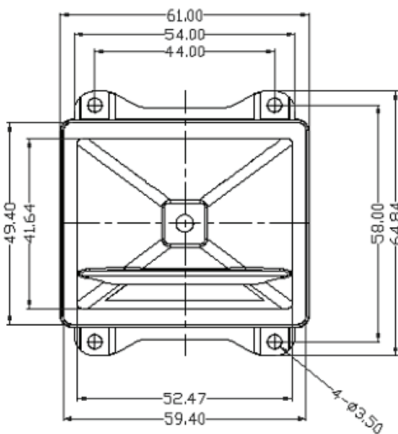
PRODUCT SPEC SHEET

Smart Scan Module GMA6165-U

DECODE RANGE

15mil DataMatrix	10 - 90MM
13mil Code39	30 - 110MM
15mil QR Code	10 - 90MM
10mil PDF417	15 - 90MM
10mil Code128	30 - 110MM

DIMENSIONS



PIN	Definition	I/O	Description
1	GND	-	0V
2	RXD_232	I/O	TTL232/RS232 receive, both optional (RS232 function to be customized)
3	TXD_232	I/O	TTL232/RS232 transmit, both optional (RS232 function to be customized)
4	D+	I/O	USB_D+ signal
5	D-	I/O	USB_D- signal
6	VCC	Power	Power 5V

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