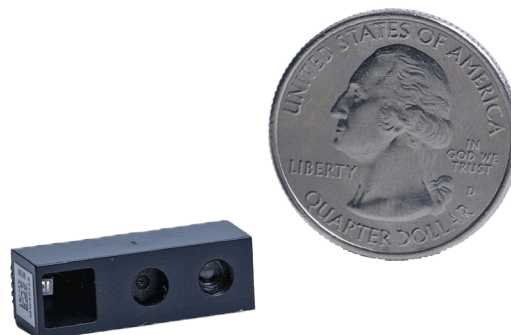


GEA201-W Industrial Scan Engine

GEA201-W is powered by proprietary core decoding technology, offering outstanding performance in 1D and 2D barcode recognition. It supports multiple interface options such as USB and TTL232, making it easy to integrate with a variety of terminal devices. Specially optimized for screen barcode scanning, it handles low brightness, protective films, and high-density codes with ease—ideal for close-range use cases such as medical equipment. Its highly integrated design combines the image sensor and decoder board into a compact unit, perfect for embedded applications. With an extended scanning range, it enhances both efficiency and adaptability. Widely used in parcel lockers, ticketing machines, kiosks, and various self-service terminals, it is a reliable solution for modern barcode scanning needs.

MAIN FEATURES

- Global Shutter
- Red Illumination
- Best-in-Class Working Range



PERFORMANCE CHARACTERISTICS

| | |
|-----------------------|---|
| Imager Sensor | CMOS |
| Optical Resolution | 640*480 pixels |
| Illumination | Red LED |
| Aiming | Red LED |
| Readability | ≥3mil (1D) |
| Field of View | Horizontal 68°, Virtual 54° |
| Screw, Pitch, Roll | Skew tolerance: ±47° from normal Pitch tolerance: ±43° from normal Roll tolerance: 360° from normal |
| Supported Symbologies | 1D: Code128, EAN-8, EAN-13, UPC-E, UPC-A, ISBN, ISSN, Code11, Interleaved 2 of 5, Code39, Code32, Code93, Matrix 2 of 5, Industrial 2 of 5, IATA25, Codabar, MSI Plessey, GS1 Databar, Plessey, Febraban, Composite 2D: QR Code, Micro QR Code, Datamatrix, PDF417, Micro PDF417, Aztec, Maxicode, Hanxin Code, DotCode, Composite |

PHYSICAL PARAMETER

| | |
|-------------------|--------------------|
| Dimension | 21.5 x 8.5 x 7.1mm |
| Weight | 2.8g |
| Operation Voltage | DC 3.3V ±5% |
| Operation Current | 140mA |
| Standby Current | 11mA |
| Interfaces | USB, TTL-232 |

USER ENVIRONMENT

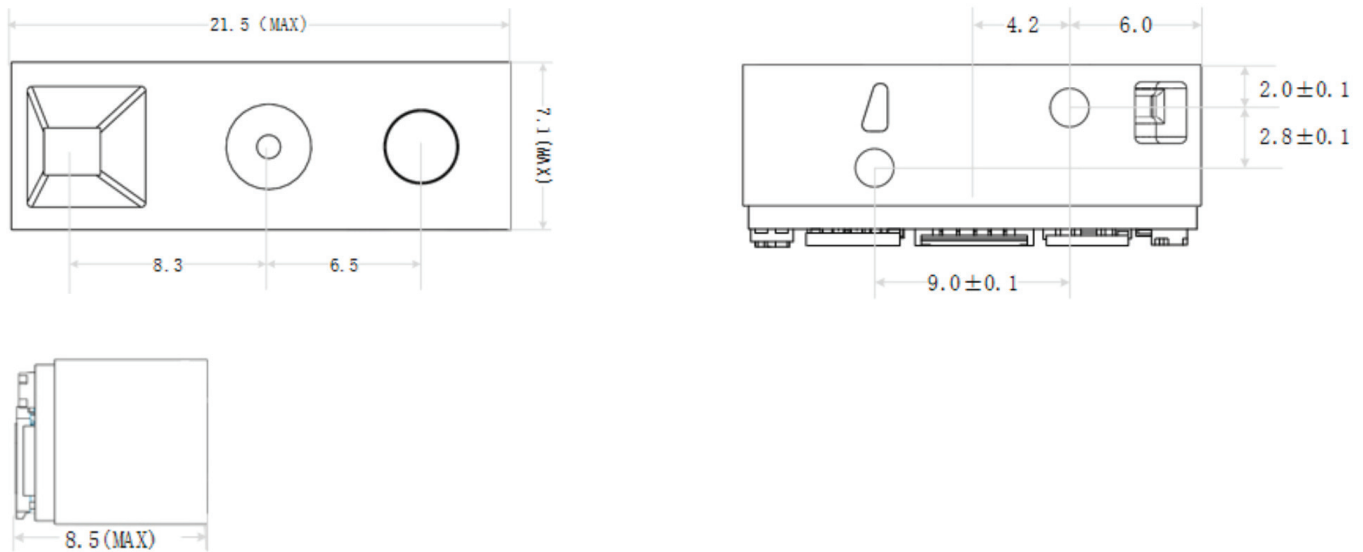
| | |
|-----------------------|-----------------------|
| Ambient Light | 0 - 100,000 Lux. |
| Operating Temperature | -20°C~55°C |
| Storage Temperature | -40°C~70°C |
| Humidity | 5%~95% non-condensing |

DECODE RANGE

| | |
|-------------------|------------|
| 5mil Code39 | 35 - 50MM |
| 6.67mil PDF417 | 30 - 60MM |
| 10mil Data Matrix | 20 - 60MM |
| 13mil EAN-13 | 40 - 170MM |
| 15mil QR Code | 20 - 120MM |

PRODUCT SPEC SHEET

Industrial Scan Engine GEA201-W

DIMENSIONS

The specific signal definitions for the 13-pin FPC are as follows:

| PIN | Definition | I/O | Description |
|-----|--------------|-----|---|
| 1 | GND | - | Power input - Negative |
| 2 | nTRIG | I | Trigger key input signal, hold low for more than 5ms to trigger code reading. |
| 3 | nRST | I | Reset signal input, active low. Hold low for more than 100us to reset the device. |
| 4 | LED | O | Light indicator output, idle output low level |
| 5 | BUZZER | O | Passive buzzer output, idle output low level |
| 6 | EXT.LED.CTRL | O | External Lighting Control |
| 7 | USB_D+ | - | USB_D+ |
| 8 | USB_D- | - | USB_D- |
| 9 | UART_TX | O | TTL level transmit |
| 10 | UART_RX | I | TTL level receive |
| 11 | GND | I | Power input - Negative |
| 12 | VCC | I | Power input - positive 3.3V |
| 13 | VCC | I | Power input - positive 3.3V |

GENERALSCAN

+1 732 391 7747

+90 542 478 5873

+1 732 391 7747

sales@generalscan.cloud

Generalscan Inc.

Generalscan LLC

Generalscan Electronics GmbH