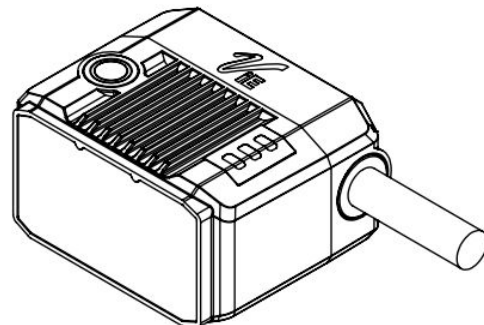


## DESCRIPTION

The XS-95 smart code reader is a high-performance device designed to effortlessly handle a wide array of 1D and 2D codes. With an impressive maximum reading speed of 45 codes per second, it excels at quickly and accurately decoding various code types. Its outstanding performance is the result of utilising a cutting-edge deep learning algorithm, ensuring consistent and dependable image processing, and enabling the recognition of multiple codes with precision.



## FEATURES

- Built-in deep learning model enables accurate code reading
- Utilises LED aiming lights for precise code alignment assistance
- Employs a focus knob for manual focusing adjustment
- Smart tune button for automatically adjusting lighting and camera parameters for optimising decoding
- Features multiple IO interfaces along with a plug-in power interface for enhanced connectivity
- Compact design, occupying minimal space

## SPECIFICATION

### General Specifications

|                       |   |
|-----------------------|---|
| Product ID            | 9808-005  |
| Model                 | XS-95   |
| Model Description     | Industrial Code Scanner - XS-95 Series 1.4MP                    |
| Dimension (L x W x H) | 46 mm (L) × 38 mm (W) × 25 mm (H) (1.8110" × 1.4961" × 0.9843") |
| Weight                | 160 g ± 10 g (0.3527 lb. ± 0.0220 lb.)                          |
| Power Consumption     | 3.6 W @ 24 VDC  |
| Compliance            | RoHS  |
| Country of Origin     | Malaysia  |
| Manufacturer          | ViE Technologies Sdn. Bhd.                                      |

### Technical Specifications

| Type     |                          | XS-95   |
|----------|--------------------------|---|
| Receiver | Sensor                   | CMOS (Mono, Global Shutter)                   |
|          | Resolution               | 1408 × 1024                                   |
|          | Lens Mounting            | M10-mount, adjusting focus manually supported |
|          | Focus                    | Manual  |
|          | Maximum Frame Rate (FPS) | 60  |
|          | Focal Length             | 6.72 mm (0.2646")                             |
|          | Pixel Size               | 3.45 µm × 3.45 µm                             |
|          | Sensor Size              | 1/2.9"  |

The product details are subject to change without further notice.

## SPECIFICATION

| Type                   |   |                        | XS-95   |
|------------------------|---|------------------------|---|
| Receiver               | Exposure Time   |                        | 16 $\mu$ s to 1 sec   |
|                        | Gain  |                        | 0 dB to 15 dB   |
| Emitter                | Illumination Light Source Option                                |                        | High Intensity Red *1   |
|                        | Pointer Light Source  |                        | Green LED *1  |
| Reading Specification  | Supported Symbols   | 2D Codes               | QR Code and Data Matrix   |
|                        |   | Barcodes               | Code 39, Code 93, Code 128, CodaBar, EAN8, EAN13, ITF25, ITF14, UPCA and UPCE |
|                        | Minimum Resolution  | 2D Codes               | 0.062 mm (0.0024")  |
|                        |   | Barcodes               | 0.023 mm (0.0009")  |
|                        | Reading Distance  |                        | 40-120 mm (1.5748"-4.7244")   |
|                        | Reading Field of View<br>(working distance at 120 mm (4.7244")) |                        | 86.74 mm x 63.09 mm (3.4149" x 2.4838")                                       |
|                        | Maximum Reading Speed   |                        | 45 codes/sec  |
| I/O Specifications     | Control Input   | Number of Inputs       | 1   |
|                        |   | Input Type             | Non-isolated Input  |
|                        | Control Output  | Number of Outputs      | 1   |
|                        |   | Output Type            | Non-isolated Output   |
|                        | Configurable bi-directional                                     | Number                 | 2   |
|                        |   | Type                   | Non-isolated  |
|                        | Ethernet  | Communication Standard | IEEE 802.3u Compliant, 100BASE-TX   |
|                        |   | Supported Protocol     | SmartSDK, TCP Client, Serial, FTP, TCP Server and UDP                         |
| Environment Resistance | Serial Communication  | Communication Standard | RS-232C Compliant   |
|                        |   | Transmission Speed     | 4800, 9600, 19200, 38400, 57600, 115200 bps                                   |
|                        | Enclosure Rating  |                        | IP65 *2   |
|                        | Surrounding Temperature   |                        | 0 to +45 °C<br>(32 to 113 °F)   |
|                        | Ambient Storage Temperature                                     |                        | -30 to +70 °C<br>(-22 to 158 °F)  |
|                        | Relative Humidity   |                        | 20% to 95% RH (No Condensation)   |
|                        | Ambient Storage Humidity  |                        | 20% to 95% RH (No Condensation)   |
|                        | Operating Environment   |                        | No Corrosive Chemical or Gas Present  |

The product details are subject to change without further notice.

## SPECIFICATION

| Type        |   | XS-95   |
|-------------|---|---|
| Rating      | Power Consumption                           | 3.6 W   |
|             | Power Supply Voltage                        | 24 VDC  |
|             | Current Consumption                         | 0.15 A  |
| Weight      |   | Approx. 160 g (0.3527 lb.)  |
| Dimension   |   | 46 mm (L) × 38 mm (W) × 25 mm (H)<br>(1.8110" × 1.4961" × 0.9843")  |
| VisionCodeX | Supported Operating System                  | Windows 7 Professional or later, 32 bit / 64 bit<br>Windows 8 Professional or later, 32 bit / 64 bit<br>(Except for Windows RT)<br>Windows 10 Professional or later, 32 bit / 64 bit<br>Windows 11 Professional or later, 32 bit / 64 bit   |
|             | Minimum Running Environment Requirement     | Processor: 2.0 GHz and above<br>(minimum 2 cores 32-bit or 64-bit)<br>RAM: 8 GigaByte (GB)<br>Storage: Required free space on hard disk 2 GB<br>(for VisionCodeX Installation)<br>Display: High definition (720p) display,<br>8 bits per colour channel   |
|             | Recommended Running Environment Requirement | Processor: 2.4 GHz and above<br>(minimum 4 cores 32-bit or 64-bit)<br>RAM: 16 GigaByte (GB)<br>Storage: Required free space on hard disk 20 GB<br>(for VisionCodeX Installation and data storage)<br>Display: Full High definition (1080p) display,<br>8 bits per colour channel<br>Graphics: Compatible with DirectX 12 or<br>later with WDDM 2.0 Driver |

| Distance |         | XS-95 (Standard Range) |         |          |         |               |         |          |         |
|----------|---------|------------------------|---------|----------|---------|---------------|---------|----------|---------|
|          |         | MINIMUM RESOLUTION     |         |          |         | FIELD OF VIEW |         |          |         |
|          |         | Barcode                |         | 2D Code  |         | Horizontal    |         | Vertical |         |
| 40 mm    | 1.5748" | 0.023 mm               | 0.0009" | 0.062 mm | 0.0024" | 28.91 mm      | 1.1382" | 21.03 mm | 0.8280" |
| 80 mm    | 3.1496" | 0.045 mm               | 0.0018" | 0.123 mm | 0.0048" | 57.83 mm      | 2.2768" | 42.06 mm | 1.6559" |
| 120 mm   | 4.7244" | 0.068 mm               | 0.0027" | 0.185 mm | 0.0073" | 86.74 mm      | 3.4150" | 63.09 mm | 2.4839" |

Note:

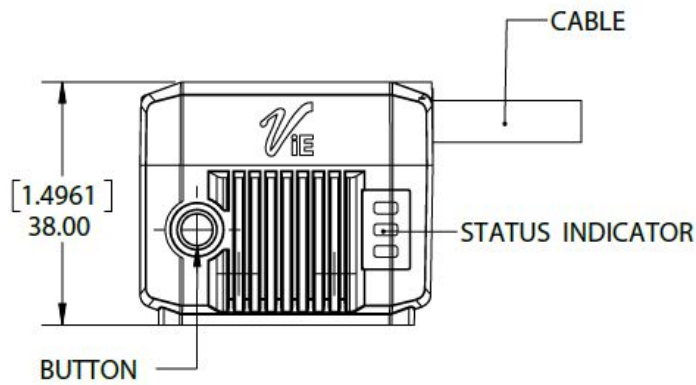
\*1 LEDs are classified according to IEC 62471 (JIS C 7550).

- Exempt group: Objects that do not cause any photobiological damage.
- Risk group 1 (low risk): Objects that do not cause damage that make constraints on normal actions necessary.
- Risk group 2 (moderate risk): Objects that do not cause damage accompanied by unpleasant feelings and thermal discomfort.
- Risk group 3 (high risk): Objects that cause damage even due to temporary or short-term exposure.

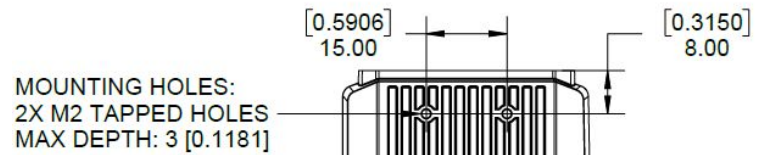
\*2 Tested against dust over an extended time, protection against contact with objects greater than 1 mm (0.0393") in diameter, such as wire or a small tool. Protected from low-pressure water jets from any direction.

The product details are subject to change without further notice.

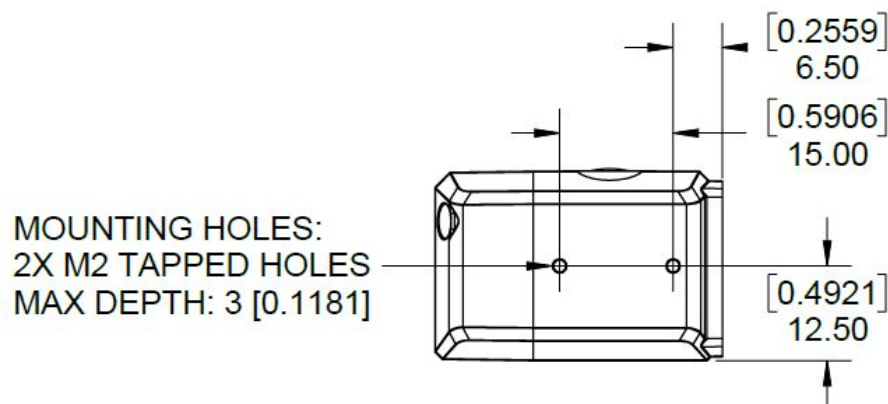
## DRAWING (Unit in mm, [inches])



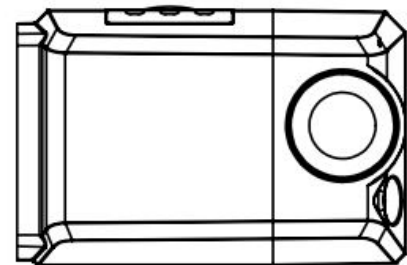
Top View



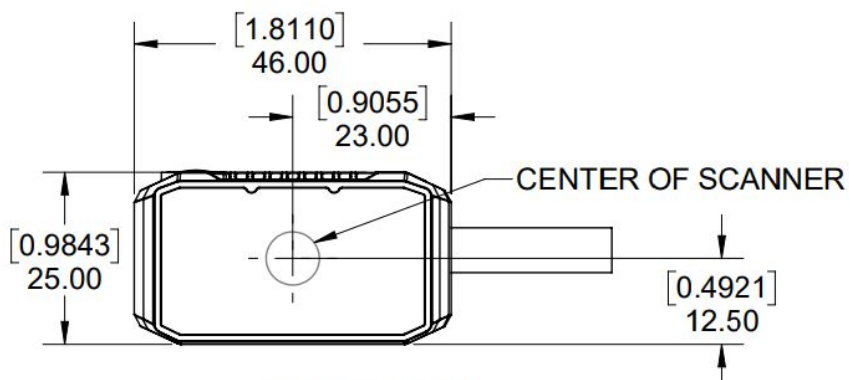
Bottom View



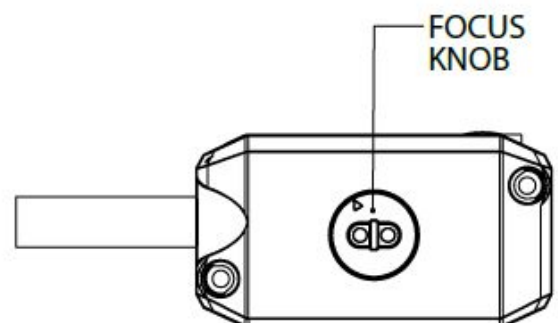
Left View



Right View



Front View



Back View

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