# GY-50U

## Handheld wired 2D industrial scanner

## Product　Description

GY-50U is a handheld wired 2D barcode scanner produced by NETUM which is mainly used for industrial environments. It is equipped with a 1280*1080 megapixel C-MOS sensor with excellent scanning recognition.

GY-50U is IP67 industrial grade, and it can maintain good working condition for a long time in a humid or dusty working environment.

GY-50U adopts a high-strength soft TPU and hard ABS two-color shell design. The internal components are designed for harsh working environments. Even if an accidental collision occurs, it will not cause damage to the product.

The overall design of GY-50U is fully in line with industrial applications. The internal decoding engine is equipped with high-brightness LEDs and high-quality photosensitive modules. Its theoretical design life can reach 100,000 hours, which greatly improves the life of the scanner.

## Product　Features

　　Supports high-performance 1D/2D barcode scanning, and also performs well in reading scenarios of printed barcodes with low contrast, stains, distortions, etc.

　　GY-50 engine is red light (mid-focus) and white light (far-focus) for automatic recognition and switching, excellent bar code compatibility and error correction capabilities, large depth of field parameters, and performance with two different focal lengths.

　　GY-50 white light is suitable for long-distance code scanning, (DM 200Mil) the longest distance can reach to 10 meters.

　　Full-range depth scanning capability, dual lenses to read various 1D and 2D codes, flexible application in different scenarios, dual lenses, double efficiency.

　　GY-50U is IP67 and suitable for various complex industrial environments.

　　The USB data cable uses a detachable cable connection for more reliable connection.

# GY-50U data sheet

| 1 | Optical performance | |
|---|---|---|
| 1.1 | Resolution： | 2pcs 1280 pixels (H)x 1080 pixels (V) |
| 1.2 | Light： | Red light (mid focus), white light (far focus) |
| 1.3 | Focus： | Laser dot focus |
| 1.4 | Scanning distance： | 100cm ~ 1000 cm @DM -200 mil 100 %,PCS 90% |
| 1.5 | View： | Medium range: Horizontal 28.0° (V), Vertical 22.0° (H)<br><br>Long range: Horizontal 11.5° (V), Vertical 9.0° (H) |
| 1.6 | Scanning angle： | Tilt: 360°, left and right: ±60°, up and down: ±60° |
| 1.7 | Code support： | 1D：UPC A , UPC E , EAN 8 , EAN 13 , Code 128 , Code 39 , Code 93 , Code 32 , Code11 , Codabar ,Plessey , MSI , Interleaved 2 of 5 IATA 2 of 5 , Matrix 2 of 5 , Straight 2 of 5 , Pharmacode , GS1 DataBar 14 , GS1 DataBar Expanded , GS1 DataBar Limited , Composite Code A , Composite Code B , Composite Code C<br><br>2D：Data Matrix , QR Code , Micro QR , PDF417, Micro PDF417 , Aztec , MaxiCode , hanxin code , Dotcode |
| 1.8 | Read range (typical)： | Code 39 (5mil)5cm~32cm<br><br>EAN/UPC (13mil) 5.5cm~190cm<br><br>EAN/UPC (15.6mil) 7cm~210cm<br><br>Code 128 (40mil) 38cm~400cm<br><br>QR (20mil) 5.5cm~140cm<br><br>DM (200mil) 100cm~1000cm<br><br>Barcode reading performance may be affected by barcode quality or |

| | | environmental factors. |
|---|---|---|
| 1.9 | Minimum resolution | 0.127(5mil)@Code 39, PCS=90% |
| 1.2.0 | Printing contrast: | More than 20%（UPC/EAN 100%，PCS 90%) |
| **2** | **Electrical characteristics** | |
| 2.1 | Working voltage | 5V±5% |
| 2.2 | Standby currency： | 110mA（max） |
| 2.3 | Working currency: | 260 mA ±5%（typical），380 mA ±5%（max） |
| **3** | **Working characteristics** | |
| 3.1 | Interface support: | USB |
| 3.2 | Transmission mode: | USB HID（USB COM） |
| 3.3 | Prompt mode: | Buzzer, vibration |
| 3.4 | Scanning mode: | Key scan, continuous scan, self-sensing scan, command trigger (etc.) |
| **4** | **Physical parameters** | |
| 4.1 | Size（mm）： | 198*74*105 |
| 4.2 | Weight： | 364g |
| 4.3 | Cable： | length：1.8m、thickness：5mm、With magnetic ring + shield, black |
| 4.4 | Color | Soft glue: black Hard glue: gray |
| 4.5 | Shell material | Soft plastic: TPU   Hard plastic: ABS |
| **5** | **Safety regulations** | |
| 5.1 | Working vibration： | 10~ 150HZ，0.5G，3 Axial, 1min/oct, 1 time/axial |
| 5.2 | Durable vibration： | 10~ 150HZ，2G  ，3 Axial, 1min/oct, 20 times/axial |
| 5.3 | drop： | Withstands a 6-meter drop onto concrete |

| 5.4 | IP rate： | IP67 |
|------|-----------|-------|
| 5.5 | Certificate： | CE ROHS FCC and so on |

*Test conditions: ambient temperature = 25℃; ambient illumination = 150 lux incandescent lamp; using the test

sample code developed by our company