OPI 2002

Imager Scanner

A lightweight 1.3 megapixel imager that provides the versatility to read all standard 1D and 2D barcode symbologies from any orientation. Simple and durable, yet comfortable and delivers the performance expected. Just plug it in and scan.

■ Product Features

Plug and Scan
The plug and play ability of the OPI 2002 allows the user to quickly connect and operate the scanner. Multi-interfacing and easy cable replacement put the exceptional scanning performance to immediate and interchangeable use.

Ergonomic and Lightweight
A lightweight and balanced design provides an ergonomic fit for all day extended use. Physical stress and user fatigue are reduced due to the OPI 2002 having a weight of only 135 g (4.8 oz) and a rubber stabilizer around the pistol grip thus providing maximum comfort during operation.

Enhanced Floodlighting
High performance LEDs create sharper contrast between the code and the background allowing for faster reading and decoding by the 1.3 megapixel imager while also improving performance by increasing the resistance to hand movement.

Application Versatility
With its unique blend of performance and ergonomics, the OPI 2002 is designed to fit in a wide range of applications. The wide scan angle provides unparalleled value in linear and 2D barcode reading, omni-directional reading and image based-data capture.

Cabled   Wireless   Stationary   OEM

OPTICON
always scanning for new ID's

Specifications
OPI 2002 Imager Scanner

Electrical specifications
Voltage requirement: 6 V ± 5%
Current consumption: 340 mA (typical use)

Optical specifications
Light source: 10 red LEDs 630 nm
Scan method: CMOS area sensor, SXGA (1.3 million pixels), gray scale
Scan rate: up to 30 fps
Reading pitch angle: -60 to 0°, 0 to +60°
Reading skew angle: -65 to 0°, 0 to +65°
Reading tilt angle: 360°
Focal plane: 110 mm / 4.33 in from window
Curvature: R>15 mm (EAN8), R>20 mm (EAN13)
Reading width: depending on reading distance and barcode label resolution
Min. resolution at PCS 0.9: 0.127 mm / 5 mil
Min. PCS value: 0.45
Depth of field: at *PDF417* and Code 39
40 - 195 mm / 1.57 - 7.68 in (res. 0.339 mm / 13 mil),
85 - 125 mm / 3.35 - 4.92 in (res. 0.127 mm / 5 mil),
35 - 230 mm / 1.38 - 9.06 in (res. 0.5 mm / 20 mil),
55 - 160 mm / 2.17 - 6.30 in (res. 0.25 mm / 10 mil),
85 - 125 mm / 3.35 - 4.92 in (res. 0.127 mm / 5 mil)
Field of view: horizontal: 47°, vertical: 37.5°

Communication specifications
Interface: Keyboard Wedge, RS232, USB(HID/VCP)

Identification
Supported barcode symbologies (1D): JAN/UPC/EAN (WPC) incl. add on,
Codabar/NW-7, Code 39, Code 93, Code 128, IATA, Industrial 2of5, Interleaved
2of5, MSI/Plessey, RSS, Composite codes
Supported 2D code symbologies: Aztec Code, Aztec Runes, Data Matrix,
(ECC200/EC0-140), Maxi Code (mode 2~5), MicroPDF417, Micro QR Code,
PDF417, QR code

Functionality
Trigger mode: manual, multiple read, auto-trigger, stand detection
Upgradeability: via cable
Image format: Windows Bitmap, JPEG, TIFF
Gradulation: 256, 16, 2
Image output mode: 4 resolutions (full, 1/2, 1/3, 1/4), 2 ranges (horizontal, vertical)

Environmental specifications
Temperature in operation: -20 to 50 °C / -4 to 122 °F
Temperature in storage: -25 to 70 °C / -13 to 158 °F
Humidity in operation: 5 - 95 % (non-condensing)
Humidity in storage: 5 - 95 % (non-condensing)
Ambient fluorescent light rejection: 10,000 lx max.
Ambient direct sun light rejection: 100,000 lx max.
Ambient incandescent light rejection: 10,000 lx max.
Antistatic electricity: 15 kV (non destructive)
Shock drop test: 1.8 m / 6 ft drop onto concrete surface
Shock vibration test: 10 - 100 Hz with 2G for 1 hour
Protection (dust and moisture, IEC529): IP 42

Physical specifications
Dimensions: 55 x 128 x 149 mm / 2.17 x 5.04 x 5.87 in
Weight body: Ca. 135 g / 4.8 oz (excl. cable)
Connector Keyboard Wedge: DIN5 F/M, MiniDIN6 F/M with power
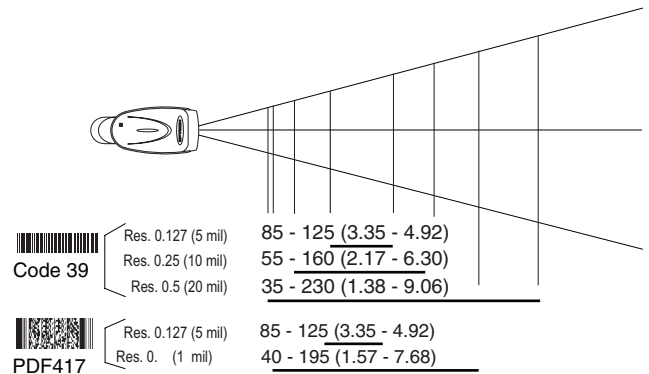Connector RS232: DB9 F with power
Connector USB: USB-A
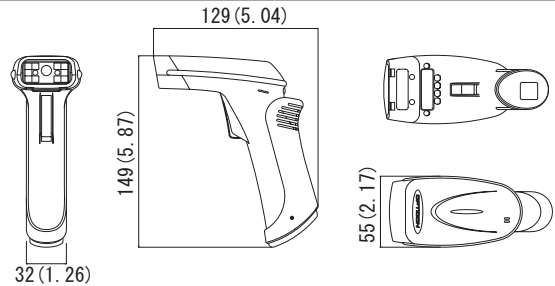
Regulatory
EMC / Product compliance: CE, FCC, VCCI, RoHS

Depth of field
Unit: mm (in)

Code 39	Res. 0.127 (5 mil)	85 - 125 (3.35 - 4.92)
	Res. 0.25 (10 mil)	55 - 160 (2.17 - 6.30)
	Res. 0.5 (20 mil)	35 - 230 (1.38 - 9.06)
PDF417	Res. 0.127 (5 mil)	85 - 125 (3.35 - 4.92)
	Res. 0. (1 mil)	40 - 195 (1.57 - 7.68)

Dimension
unit: mm (in)

129 (5. 04)
149 (5. 87)
55 (2. 17)
32 (1. 26)

Accessories
Sold separately
AC Adapter: 6V/2A (power for Keyboard Wedge / RS232)
Auto-trigger stand: ST-80 white