

# OPI 4002

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, durable and coupled with a IEEE 802.15.4 based communication protocol that delivers quick, accurate and wireless performance.

## Product Features

### High Performance Imager

Using Opticon's latest imaging technology, the 1.3 megapixel OPI 4002 delivers quick decodes and provides the user confidence that the code will be read every time by means of targeting LEDs that guide the user to the scanner's focal point.

### Wireless Connectivity via IEEE 802.15.4

The OPI 4002 provides wireless connectivity using protocol (IEEE 802.15.4) that has lower power consumption and a smaller code base than other wireless alternatives.

### Quick Connect through USB without Drivers

The OPI 4002 wirelessly connects through a simple dongle that allows the scanner to appear as a USB keyboard and is included with every device. Just scan the barcode on the dongle after plugging it into an available USB port and the setup is complete.

### Application Versatility

With a wide scan angle for reading 1D & 2D barcodes in any orientation coupled with a comprehensive feature set, the OPI 4002 provides application flexibility and maximizes ease of use.

Cabled

**Wireless**

Stationary

OEM

**OPTICON**  
always scanning for new ID's

# Specifications

## OPI 4002 Imager Scanner

### Electrical specifications

Main battery pack: Lithium-Ion 3.6 V 1150 mAh  
Main battery pack operating time: Ca. 30 hours (1 scan / 5 sec)  
Charging method: via enclosed AC adapter OPA 1001 or optional charger CHG 4001  
Battery charging time: Ca. 3 hours (full charge)

### Optical specifications

Light source: illumination 4 red LEDs 630 nm, aiming 2 green LEDs 527 nm  
Scan method: CMOS area sensor, SXGA (1.3 million pixels), gray scale  
Scan rate: up to 30 fps  
Reading pitch angle: -50 to 0°, 0 to +50°  
Reading skew angle: -60 to 0°, 0 to +60°  
Reading tilt angle: 360°  
Focal plane: 85 mm / 3.35 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: 0.1 mm / 4 mil for Code 39, 0.127 mm / 15 mil for PDF417  
Min. PCS value: 0.45  
Depth of field: at \*PDF417\* and Code 39  
\*25 - 130 mm / 0.98 - 5.12 in (res 0.399 mm / 13 mil)\*,  
\*48 - 80 mm / 1.89 - 3.15 in (res 0.127 / 5 mil)\*,  
30 - 105 mm / 1.18 - 4.13 in (res. 0.25 / 10 mil),  
55 - 75 mm / 2.17 - 2.95 in (res. 0.1 / 4 mil)  
Field of view: horizontal: 47°, vertical: 37.5°

### Communication specifications

Available Interface: IEEE 802.15.4  
Output power level: 0 dBm or less  
Frequency: 2.4 Hz  
Operation range: depending on environment characteristics, the prospective reach distance is 30 meters  
Connection mode: 1 to 1 (OPI4002 scanner to USB(HID) dongle)

### Identification

Supported barcode symbologies (1D): JAN/UPC/EAN (WPC) incl. add on, 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

### Environmental specifications

Temperature in operation: -0 to 40 °C / -32 to 104 °F  
Temperature in storage: -20 to 60 °C / -4 to 140 °F  
Humidity in operation: 5 - 90 % (non-condensing)  
Humidity in storage: 5 - 90 % (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: 1.5 m / 5 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

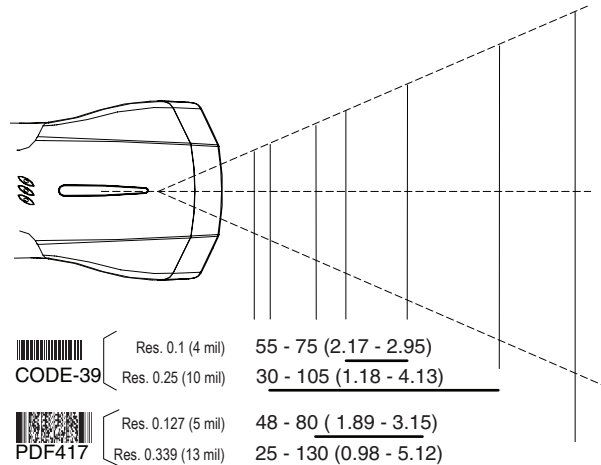
Dimensions: 59 x 43 x 164 mm / 2.32 x 1.69 x 6.46 in  
Weight body: Ca. 125 g / 4.4 oz (excl. cable)

### Regulatory

Product compliance: CE, FCC, VCCI, RoHS

### Depth of field

Unit: mm (in)



### Dimensions

unit: mm (in)

