

# OPH-3001

## Laser scanner

The OPH-3001 is a reliable, durable and affordable handheld computer with a vibrant color display. It features an elegant design and a high speed, integrated laser scanner that quickly and accurately scans barcodes.



## Highlights

- Durable, reliable and affordable mobile terminal
- Ideal solution for asset management, inventory control and mobile sales automation
- Vibrant, TFT LCD QVGA color display with adjustable backlight
- Intuitive 22-key keyboard
- Integrated laser barcode scanner: 100 scans/second
- Features 4 MB FlashROM, 2 MB SRAM and 128 MB NAND Flash
- Communication and battery charging through mini USB 2.0, VCP
- Withstands 1.5 m drop to concrete
- Features IP54 rating – comprehensive sealing against dust and moisture
- Compact size and weight: 58.2 x 180.8 x 23.8 mm (W x H x D) and 156 grams
- Programmable: free Opticon SDK enables solution providers to create customized scanning solutions
- Backed by a two year warranty

# OPH-3001

## Product Specifications

### Operation

**CPU:** 32-bit, 96 MHz

**O/S:** Proprietary

**Software:** Programmable in C-language. Software development kit with compiler free downloadable

**RTC:** Supports year, month, day, hour, minute, second (leap year supported)

### Memory

**Nand Flash:** 128 MB

**Flashrom:** 4 MB

**DRAM:** 4 MB

### Display

**Type:** TFT LCD QVGA color display with backlight

**Size:** 2", 320 x 240 pixels

### Operating indicators

**Visual:** 1 LED (red/green/orange)

**Non-visual:** Buzzer

### Operating keys

**Entry options:** 21 keys total, 12 key (alpha)numeric keypad, 4 navigation keys, 3 function keys, 1 scan key, 1 esc key

### Communication

**USB:** USB, ver. 2.0, VCP / MSD / HID

**IRDA:** Ver 1.2 physical layer, baudrate 1200 bps - 115.2 kbps

### Power

**Rechargeable battery:** Lithium-Ion 3.7V 1100 mAh

**Backup battery:** Yes for RTC

**Operating time:** Ca. 40 hours (backlight off, 1 scan / 10 sec)

**Data retention time:** Indefinitely

**Charging method:** Enclosed USB cable

### Barcode Scanner Optics

**Light source:** 650 nm visible laser diode

**Scan rate:** 100 scans / seconds

**Reading pitch angle:**  $\pm 35^\circ$

**Reading skew angle:**  $-50$  to  $-8^\circ$ ,  $+8$  to  $+50^\circ$

**Reading tilt angle:**  $\pm 20^\circ$

**Curvature:**  $R \geq 15$  mm (EAN8),  $R \geq 20$  mm (EAN13)

**Min. pcs value:** 0.45

**Depth of field at code 39:**

60 - 120 mm (0.127 mm) / 2.36 - 4.72 in (5 mil),

50 - 150 mm (0.15 mm) / 1.97 - 5.91 in (6 mil),

50 - 260 mm (0.25 mm) / 1.97 - 10.24 in (10 mil),

50 - 260 mm (0.5 mm) / 1.97 - 10.24 in (20 mil),

70 - 650 mm (1.00 mm) / 2.76 - 25.59 in (39 mil)

### Supported symbologies

**Barcode (1D):** JAN/UPC/EAN incl. add on, Codabar/NW-7, Code 11, Code 39, Code 93, Code 128, GS1-128 (EAN-128), GS1 Databar (RSS), IATA, Industrial 2of5, interleaved 2of5, ISBN-ISMN-ISSN, Matrix 2of5, MSI/Plessey, S-Code, Telepen, Tri-Optic, UK/Plessey  
**Postal Code:** Chinese Post, Korean Postal Authority code  
**2D code:** Composite Codes, MicroPDF417, PDF417

### Durability

**Temperature in operation:**  $-10$  to  $50^\circ\text{C}$  /  $14$  to  $122^\circ\text{F}$

**Temperature in storage:**  $-20$  to  $60^\circ\text{C}$  /  $-4$  to  $140^\circ\text{F}$

**Charging temperature:**  $0$  to  $40^\circ\text{C}$  ( $32$  to  $104^\circ\text{F}$ )

**Humidity in operation:** 20 - 85% (non-condensing)

**Humidity in storage:** 20 - 85% (non-condensing)

**Ambient light immunity:** Fluorescent 4,000 lx max, direct sun 80,000 lx max, incandescent 4,000 lx max

**Drop test:** 1.5 m / 5 ft drop onto concrete surface

**Protection rate:** IP54

### Physical

**Dimensions (WxHxD):** 58.2 x 180.8 x 23.8 mm / 2.29 x 7.12 x 0.94 in

**Weight body:** Ca. 156 g / 5.5 oz (incl. battery)

### Regulatory & Safety

**Product compliance:** CE, FCC, RoHS, IEC60825-1 Class 2, FDA CDRH Class II, EN55022, EN55024

### Items

**Enclosed:** Wrist strap, USB cable, standard battery

**Sold Separately:** Rechargeable battery