

## Handheld Solutions

# OPH-1005

## Handheld Mobile Computer

RS232/USB Cradle

Ethernet/USB Cradle

Modem Cradle

GSM Cradle

IrDA



### + Features and Benefits

- Small, rugged mobile terminal featuring an elegant design
- Ideal solution for inventory control and mobile sales automation
- Vibrant, TFT LCD QVGA color display with adjustable backlight
- Integrated laser barcode scanner—100 scans/second
- Enhanced, easy to use 23-key keyboard
- Features 128 MB FlashROM, 4 MB RAM and 4 MB SRAM
- Withstands 5' drop to concrete
- Features IP54 rating, comprehensive sealing against dust and moisture
- Compact size and weight: 2.17"W x 5.35"L x 0.91"D and 4.9 ounces
- Stores data onboard for later transfer via IrDA through a charging/communication cradle (sold separately)
- Five communication/charging cradle choices available: CRD1001 (RS232, USB), CRD1002 (Modem), CRD1003 (GSM), CRD1004 and CRD1006 (USB, Ethernet)
- Programmable—free Opticon SDK enables solution providers to create customized scanning solutions
- Backed by a two year warranty

## Operation

- **CPU:** RX62N 32-bit MCU
- **OS:** Proprietary
- **Software:** Programmable in C-language, software development kit with compiler freely downloadable
- **RTC:** Supports year, month, day, hour, minute, second (leap year supported)

## Memory

- **NAND Flash:** 128 MB FlashROM: 4 MB RAM: 4 MB SRAM

## Display

- **Type:** TFT LCD QVGA color display with backlight
- **Size:** 2", 320 x 240 pixels
- **Font Size:** 6x6 / 6x12 / 8x8 / 8x16 / 12x24 dots

## Operating Indicators

- **Visual:** Dual-color LED (red/green)
- **Audible:** Buzzer

## Operating Keys

- **Entry Options:** 23 keys total, 12 key (alpha) numeric keypad, 2 navigation keys, 4 function keys, 3 control keys, 1 power key, 2 hot keys, 1 scan key

## Communication

- **IrDA:** Version 1.2, baudrate 1200 bps - 115.2 kbps

## Power

- **Rechargeable Battery:** Lithium-Ion 3.7V 1100mAh
- **Operating Time:** Ca. 40 hours (backlight off, 1 scan / 10 sec)
- **Data Retention Time:** 24 hours
- **Charging Method:** Separate cradle CRD1001, CRD1002, CRD1003

## Barcode Scanner Optics

- **Light Source:** 650 nm visible laser diode
- **Scan Method:** Vibrating mirror
- **Scan Rate:** 100 scans/sec
- **Reading Pitch Angle:** -35 to 0°, 0 to +35°
- **Reading Skew Angle:** -50 to -8°, +8 to +50°
- **Reading Tilt Angle:** -20 to 0°, 0 to +20°
- **Curvature:** R>15 (EAN8), R>20 (EAN13)
- **Minimum PCS value:** 0.45
- **Depth of Field at PCS 0.9, Code 39:**  
39 mil (1.0 mm): 2.76 - 17.72 in (70 - 450 mm)  
20 mil (0.5 mm): 1.97 - 12.60 in (50 - 320 mm)  
10 mil (0.25 mm): 1.97 - 7.87 in (50 - 200 mm)  
6 mil (0.15 mm): 2.17 - 4.72 in (55 - 120 mm)

## 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
- **Barcode (2D):** Composite Codes, MicroPDF417, PDF417
- **Barcode (Postal Codes):** Chinese Post, Korean Postal Authority code

## Durability

- **Temperature:**  
Operation: 14 to 122 °F (-10 to 50 °C)  
Storage: -4 to 140°F (-20 to 60°C)
- **Humidity:**  
Operation: 20 - 85% (noncondensing)  
Storage: 20 - 85% (non-condensing)
- **Ambient Light Immunity:** White 4,000 lx max, Fluorescent 4,000 lx max, Direct sun 80,000 lx max
- **Drop Test:** 5 ft (1.5 m) onto concrete surface
- **Protection Rate:** IP 54

## Physical

- **Dimensions (WxHxD):** 2.17 x 5.35 x 0.91 in (55 x 136 x 23 mm)
- **Weight (Body):** Ca. 4.9 oz (140 g) (incl. Lithium-Ion battery)
- **Case:** ABS, Black

## Regulatory and Safety

- **Product Compliance:** CE, FCC, RoHS, JIS-C-6802 Class 2, IEC 60825-1 Class 2, FDA CDRH Class II

## Enclosed Items

- Rechargeable battery
- Hand strap

## Sold Separately

- **CRD1001 Cradle:** RS232/USB communication, charging
- **CRD1002 Cradle:** Modem communication, charging
- **CRD1003 Cradle:** GSM communication, charging
- **CRD1004 Cradle:** Ethernet/USB communication, charging
- **CRD1006 Cradle:** Ethernet/USB communication, charging