

Portable Laser Data Collection Terminal

Model PHL-1600

Features

- ◆ *Best price/performance in it's class*
- ◆ *100 scans per second*
- ◆ *Ergonomic, lightweight design for ease of operation*
- ◆ *Quick & easy configuration*
- ◆ *Optimized scan & view angle; scans up to 15" distance*
- ◆ *DOS-based, C language application programming environment*
- ◆ *Long battery life and "auto-off" feature; will accept rechargeable battery (optional)*



The Next Generation High Performance Terminal

The Opticon PHL-1600 outperforms higher priced terminals and it is the lowest priced terminal to buy and operate. The PHL-1600 is an all-day terminal which is easy to use in virtually any application. It's so small, light and ergonomic, it feels more like a TV remote than a full function, high speed laser terminal. Don't let its small size fool you - at the heart of the PHL-1600 is a system that delivers 100 laser scans per second for very high "first pass" read rates. It will even read bar codes all the way down to 5 mil resolution.

"Go Anywhere" Portability

The Opticon PHL-1600 is only 6.75" tall, 2.25" wide and 1.5" thick (smaller than most cell phones) and weighs a mere 7.8 ounces, including batteries (less than half the weight of most competitors)! The PHL-1600 fits into any size hand and features easy, left or right one-handed operation. The PHL-1600 delivers up to 120 hours of operation on two "AA" batteries (rechargeable NiMH batteries optional). Selectable automatic power-down feature

reduces its already low battery drain. It features a real-time clock to time and date-stamp collected data, and a programmable backlit LCD screen permits selection of the characters and functions required, as well as optimized scan and view angle for ease of reading operation.

Create Your Own Data Collection Applications

A copy of Rapid GEN™ Program Generator software is included with each terminal, providing users with no prior programming experience the ability to customize screens for data collection and entry functions. Each terminal is pre-configured with a standard application program for instant, out-of-the-box use.

For complete information on the PHL-1600 and other scanning solutions, contact Opticon toll free at 800-636-0090, or visit our web site at www.opticonUSA.com.



TECHNICAL DATA

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE

PHL-1600 REV. 10/99

Optical

Laser	670 nm (visible red)
Output Power	<1 mw
Scan Rate	100 scans/sec.
Focal Distance	0 to 15°
Bar/Space Width	5 mils (min.)
Depth-of-Field	5.5 (10 mil 0.9 PCS)
Field Width	@ 1" from window = 2.3" @ 15" from window = 9.7"

Electrical / Power

Operating Voltage	3 Volts
Battery Life @ 1 scan/5 sec.	
AA Alkaline cells (x 2)	120 hours
NiMH (rechargeable)	60 hours
Built-in recharger circuit	
Lower Battery Indicators	Main & back-up batteries
Back-up Power	Lithium battery capable of maintaining data in RAM for 4 months w/o main battery
Auto Power Off	User programmable @ 0 to 60 minutes of inactivity
In-Terminal	
NiMH Battery Charger	Charge time 6 hrs @ 5V/250 mA

Environmental

Temperature	
Operating	+32 to +122 °F
Storage	-4 to +140 °F
Operating Humidity	20 to 90%
Drop Test	4' to concrete; 10 drops (all sides)
ESD	15KV static discharge
Regulatory Approvals	CDRH; FCC Rules, Part 15; MIL-STD 461; UL1950

Physical

Case Material	ABS Plastic
Dimensions	6.75 x 2.25 x 1.5 in
Weight	7.8 oz., including batteries

Communications

Serial RS232	2,400 to 19,200 bps
Optical IrDA (ver1)	2,400 to 115,200 bps
Keypad	27 keys; 10 programmable
Display	Backlit 96 x 38 pixel graphic LCD
Alphanumeric font	
(# of characters programmable)	16 characters x 8 lines 12 characters x 6 lines 16 characters x 4 lines 8 characters x 4 lines 6 characters x 3 lines

Other Features

Real Time Clock, Programmable LED (tri-color) indicator and programmable tone generator.

Warranty

One year from date of purchase.

Technical Support / Sales

Opticon's experienced, well trained technical staff are available to answer questions and assist you in every way possible in support of our products. Call today to find out how our products can be adapted to your design: (800) 636-0090, or visit our web site at www.opticonUSA.com

Decodable Symbologies

Codabar, Code 11, Code 128, Code 39, Code 93,
EAN 13 & 8, Interleaved 2 of 5, MSI, Standard 2 of 5 & UPC-E & A

CPU & Memory

CPU	16-bit CMOS Mitsubishi
Memory	512 Kb data RAM standard 1 Mb data RAM optional 256 Kb Flash memory 64 Kb RAM working memory

Programming

Operating System	Proprietary BIOS
Host	PC running MS-DOS 3.0+, Windows (ver) 3.1, 95 or 98
Language	C
Cross Compiler	CC7700 (IAR Systems)
Software Support	Application program development kit, including ready to use sample programs. Includes source code.
Supplemental Functions	OS and application programs are upgradeable.

Ordering Information

Description	Part Number
PHL-1600 Terminal w/ 512 Kb Memory*	PHLTRM05B-00
PHL-1600 Terminal w/ 1 Mb Memory*	PHLTRM10B-00
PHL-1600 RS232 Communications Cable	41-PHL232-00
NiMH Battery Pack	02-BATNHM-00
Lithium Back-up Battery	02-BATLTH-00
IAR Cross Compiler	42-SFTCMP-00
PHL-1600 Quick Start Manual	25-TRMQS-02
PHL-1600 Technical Manual	25-TRMTK-01

* Includes one (1) copy of PHL-1600 Quick Start Manual.

Accessories

Description	Part Number
Holster	PHLHOLSTER-01
RS232 External IrDA Adaptor	PHLIR-01
RS232 RF Transceiver (902-928 Mhz)	36-RF-01
In-Terminal NiMH Battery Charger Cable	41-PHLTRMCH-00
Encore™ Portable Thermal/Thermal Transfer Printers*	

* Contact Opticon for further details.

Productivity Software

Description	Part Number
Rapid TRAK™ Asset Management Software (1 User)	42-SFTTRK-00
Rapid TRAK™ Multi-User (2 to 5)	42-SFTTRK-00M
Rapid STOCK™ Inventory Mgmt Software (1 User)	42-SFTSTK-00
Rapid STOCK™ Multi-User (2 to 5)	42-SFTSTK-00M
Rapid COUNT™ Physical Inventory Software (1 User)	42-SFTCNT-00
Rapid COUNT™ Multi-User (2 to 5)	42-SFTCMT-00M
Rapid GEN™ Program Generator Software *	42-SFTGEN-00

* A copy of Rapid GEN™ is included with each terminal.



• 8 Olympic Drive
• Orangeburg, NY 10962
• Toll Free 800.636.0090
• Tel 914.365.0090
• Fax 914.365.1251
• www.opticonUSA.com