

IMAGETEAM™ 3800IR

Infrared Hand Held Linear Imager



Features

Increase Security and Privacy - The IT3800IR's infrared illumination sees right through infrared laminated bar codes - bar codes the human eye can't see. This added level of protection increases the security and the privacy of your operation.

Real World Reading Performance - With 270 scans per second, linear optics, and innovative decoding technology, the IT3800IR offers aggressive, accurate reading of real world bar codes. Whether it's printer-induced bar space variation, faded labels, short quiet zones, low contrast codes, pits and voids, or all of the above, the IT3800IR won't let you down.

Intuitive Aiming Line - The bright, sharp, and focused aiming line makes it easy to aim and scan codes in any lighting conditions - from darkness to full sunlight.

Built to Last - 5 Year Warranty - Enclosed in a high impact resistant, durable case, and with no moving parts, the IT3800IR delivers years of reliable service in your demanding work environment.

Powerful, Flexible Architecture - Connects and interfaces to all major PCs and commercial terminals easily and quickly with Windows®-based programming tools or bar code programming menus.

The IMAGETEAM™ 3800IR is a high performance reader of both bar codes and bar codes overlaid with infrared laminates.

Improved security and privacy is a critical concern of many companies today. Employee identification badges, secure facilities, and customer loyalty cards are just a few of the areas in which companies are looking to increase their security and information privacy standards. Laminated bar codes are one method of achieving increased security and privacy. The IR laminate covers the underlying bar code, making the bar code invisible to the human eye and most copying machines, but not to the IT3800IR. This invisibility provides the security and privacy customers are seeking, and the underlying bar code provides all the productivity and performance for which bar code technology is noted. With the IT3800IR and laminated bar codes, you achieve both security and performance, a winning combination in today's applications.

With 270 scans per second, linear optics, and innovative decoding technology, the IT3800IR offers aggressive, accurate reading performance on today's real world bar codes. Combined with infrared illumination technology, the IT3800IR offers this performance even when bar codes are covered with IR-readable laminates. The security and privacy customers require, and the performance customers have come to expect with Hand Held Products' IMAGETEAM 3800 family of linear imagers is all in this one reader.

Anyone can warrant their product for 5 years, but if it is not built to last, you pay the hidden costs of warranty. The IT3800IR not only comes with a 5 year warranty, but was also designed from the ground up and built to last in the most demanding of environments.

Each decoded output scanner has the capability to connect as a keyboard wedge, use the serial port, output non-decoded laser compatible signals, or operate in wand emulation mode. The IT3800IR connects to all popular PCs, Apple MACs, and portable data terminals. A non-decoded mode can be used with external wedge decoders and portable terminals or other devices with decoding capability. Standard cables are used to reduce replacement expenses.

IMAGETEAM™ 3800IR Specifications

Performance

Illumination:	880 nm Infrared LED
Aiming Line:	630 nm Visible Red LED
Receiving Device:	3648 element linear imager
Reading Distance on Laminated Codes:	As close as 1.6 in. (4.1 cm) on 5 mil bar codes, and as far away as 6.5 in. (16.5 cm) on 13 mil bar codes
Reading Width:	2.2 in. (5.6 cm) code width at 2.5 in. (6.4 cm) distance on 100% UPC bar code
Resolution:	5 mil. at 2.5 in. (6.4 cm) distance
Skew Angle:	±30°
Pitch Angle:	±15°
Horizontal Velocity:	2 in. (5.1 cm) per second
Minimum Reflectance Difference:	30% at 880 nm after reflection
Scan Rate:	Programmable to 270 scans per second
Decode Rate:	270 decodes per second

Note: Ink used to create the bar code pattern must be chosen so the black/white reflections are appropriate for use with IR readers. Not all inks that appear dark to the eye are dark when viewed with infrared illumination. If a black security laminate is used, the transmission coefficient for the laminate should be greater than 95% (excluding reflection losses) at 880 nm so that a minimum reflectance difference of 30% is achieved.

Mechanical/Electrical

Dimensions

Length:	5.3 in. (13.5 cm)								
Height:	6 in. (15.2 cm)								
Width:	3.1 in. (7.9 cm)								
Weight:	6.3 oz. (179.2 g)								
Housing:	Polycarbonate/ABS blend, UL 94V0								
Power Requirements:	5Vdc ± 10% at scanner								
Current Draw:	<table><tr><td><u>Scanning</u></td><td><u>Standby</u></td></tr><tr><td>@270 s/s</td><td>335mA</td><td>125mA</td></tr><tr><td>@67 s/s</td><td>150mA</td><td>125mA</td></tr></table>	<u>Scanning</u>	<u>Standby</u>	@270 s/s	335mA	125mA	@67 s/s	150mA	125mA
<u>Scanning</u>	<u>Standby</u>								
@270 s/s	335mA	125mA							
@67 s/s	150mA	125mA							

Power Supply	
Noise Rejection:	Maximum 100mV peak to peak, 10 to 100 kHz

Environmental

Temperature

Operating:	+32°F to +122°F (0°C to +50°C)
Storage:	-4°F to 140°F (-40°C to +60°C)
Humidity:	0 to 95%
Mechanical Shock:	Operational after 50 drops from 5 ft. (1.53 m) to concrete
Ambient Illumination:	0 - 70,000 lux
ESD Protection:	Functional after 15kV discharge
Vibration:	Withstands 5G peak from 20 to 300 Hz

Agency: FCC Class B, CE EMC Class B, CE Low Voltage Directive, IEC60825-1 LED Safety: Class 1, UL, cUL listed, TÜV

MTBF: per MIL-HDBK-217F Ground Benign exceeds 100,000 hours

Symbologies: Codabar, Code 3 of 9 including PARAF, Interleaved 2 of 5, Code 2 of 5, Matrix 2 of 5, Code 11, Code 128, UPC, EAN/JAN, China Postal Code.

Interfaces: All popular PCs and terminals via keyboard wedge, keyboard replacement/direct connect, Apple ADB, USB, TTL Level Serial Wedge, TTL level RS-232, wand emulation mode, and includes (HHLC) non decoded laser compatible output.

Warranty: Five year factory warranty.

Worldwide Offices

Offices Serving North America

Skaneateles Falls, NY
Tel: +1 315 685 8945
or, in North America: +1 800 582 4263
napresales@handheld.com
Charlotte, NC
Tel: +1 704 998 3998
or, in North America: +1 800 582 4263
napresales@handheld.com

Offices Serving Europe, Middle East, and Africa

Europe
Tel: +31 (0) 40 29 01 600
eupresales@handheld.com
United Kingdom
Tel: +44 (0) 1 925 240055
eupresales@handheld.com
Italy
Tel: +39 (0) 2 67 100752
eupresales@handheld.com

France

Tel: +33 (0) 1 41 158220
eupresales@handheld.com
Germany
Tel: +49 (0) 7 477 151377
eupresales@handheld.com
Spain
Tel: +34 93 228 78 68
eupresales@handheld.com

Offices Serving Asia and the Pacific Rim

Hong Kong
Tel: +852 2511 3050
appresales@handheld.com
Japan
Tel: +813 5770 6312
appresales@handheld.com

Offices Serving Latin America

Naples, Florida
Tel: +1 239 263 7600
lapresales@handheld.com
São Paulo
Tel: +55 11 5016 3454
lapresales@handheld.com
Rio De Janeiro
Tel: +55 21 2176 0250
lapresales@handheld.com

Web Site Address www.handheld.com

Hand Held Products, Inc., ("Hand Held Products") © 1999-2004. All rights reserved. Printed in the U.S.A.

Due to Hand Held Products' continuing product improvement programs, specifications and features herein are subject to change without notice.