Honeywell

3800i

Industrial Linear Imager

The 3800i handheld industrial image readers are the first industrial class readers to bring you Honeywell's industry-leading image technology. This technology allows you to read bar codes at ranges up to 82 inches (208 cm). In real world applications, this extended read range means less climbing and reaching, and more operator productivity.

Based on the proprietary image technology, the 3800i picks up your bar code image and processes its content 270 times per second. In a fraction of a second, the Honeywell digital image processor quickly and easily determines the data content and sends it to your host computer. This proprietary technology quickly and securely identifies poor quality symbols, and still delivers snappy performance.

We are so confident the 3800i image reader will withstand your industrial applications that we have backed it by a solid warranty. Every 3800i comes to you with a 3 year warranty against defects. Shock absorbing rubber overmold on the case and a sealed optics module ensure this device will survive dozens of 6.5 foot (2 meter) drops to concrete. Although we do not expect you to treat your reader this way, we know it will survive many years of accidental abuse.

Your industrial applications often take you into environments that challenge many devices. Your loading dock has extreme temperature variations, dirt, dust, and rain that will stress many bar code scanners. The 3800i is environmentally sealed to an IP54 rating, which prevents dust and water from entering the units and degrading performance. Sometimes you need to use this device outdoors during winter or other freezing temperature conditions. This imager withstands applications that subject it to constant -22°F (-30° C) temperatures and still survives.

For reading in applications that exhibit high ambient light, the 3800i can be ordered with an aiming beam, which offers true point and shoot performance without moving laser optics. This option allows the operator to reliably find and scan the code.

Features

- **Superior Read Range:** Imaging technology now extends the performance range out to 82 inches (208 cm) on linear codes. Long range reading performance eliminates the need to reach and climb to scan codes.
- **Durable:** There are no moving parts to wear out and Honeywell backs this with an industry-leading 3 year warranty. Reliable performance year after year with no downtime.
- **Easy to Use:** True point and shoot handheld ergonomics easily fits oversized gloved hands. Intuitive aiming means operators will become productive quickly.
- **Rugged Packaging:** An impact absorbing, shock resistant housing withstands fifty 6.5 foot (2 meter) drops, and is sealed to prevent dust, moisture, and other contaminants from entering the scanner. Designed to survive the most demanding industrial applications.
- **Fast and Aggressive Decode:** Even on poorly printed or damaged codes, the 270 scans per second digital image logic is over 6 times faster than other technologies. Spend less time trying to re-scan poor codes and speed up the work process.

3800i Specifications

Performance

Illumination:	630 nM Visible Red LED
Receiving Device:	3648 element linear imager
Reading Width:	15 mil. code, 15 in. (38.1 cm) from nose, 10 in. (25.4 cm) wide
Resolution:	7.5 mil. at 9 in. (22.9 cm) distance
Skew Angle:	±65°
Pitch Angle:	±65°
Horizontal Velocity:	2 in. (5.1 cm) per second
Minimum Symbol Contrast:	20%
Scan Rate:	Up to 270 scans per second
Decode Rate:	270 decodes per second

Ranges for the 3800i

Narrow Width	*Depth of Field (300 Lux Lighting)*
7.5 mil	*6.5 - 15 in. (16.5 - 38 cm)*
100% UPC	*2.5 - 28 in. (6.4 - 71 cm)*
15 mil	*2.5 - 31 in. (6.4 - 78.7 cm)*
20 mil	*1.5 - 42 in. (3.8 - 107 cm)*
55 mil	*4.0 - 82 in. (10.2 - 208 cm)*

Mechanical/Electrical

Dimensions	without aimer	with aimer*
Length:	5.3 in. (13.5 cm)	5.3 in. (13.5 cm)
Height:	6.4 in. (16.3 cm)	6.5 in. (16.5 cm)
Width:	3.2 in. (8.1 cm)	3.2 in. (8.1 cm)
Weight:	7.5 oz. (213 g)	8.4 oz. (238 g)
Housing:	UL 94V0 grade	
Power Requirements:	4.5 - 14Vdc at scanner	

Current Draw (maximum):

Input	Scanning	Idle
5V	235mA	68mA
12V	142mA	49mA

Power Supply

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

Environmental

Operating Temperature:	-22°F to +122°F (-30°C to +50°C)
Storage Temperature:	-40°F to +140°F (-40°C to +60°C)
Humidity:	0 to 95%, non-condensing
Sealing:	IP54 (water and dust resistant)
Mechanical Shock:	Operational after 50 drops from 6.5 ft. (2 m) to concrete
Ambient Illumination:	0 - 70,000 lux
ESD Protection:	Functional after 15kV discharge
LED Classification:	Class 1 under EN60825-01
Laser Classification Aimer Beam only*:	Class 2 under 21 CFR 1040.10 and 1040.11 1mW max output, 650 nM, EN60825-1: 1994+A11+A2
Vibration:	Withstands 5G peak from 22 to 300 Hz
Agency:	**International:** CB scheme to IEC60950-1 & IEC60825-1 Class 1 LED **USA:** FCC Part 15 subpart B Class B. UL listed to 60950-1 **Canada:** ICES-003 Class B. cUL listed to CSA C22.2 No. 60950-1-03 **Europe:** CE 2004/108/EC EMC Directive to EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3. 2006/95/EC Low Voltage Directive **GS Mark:** TUV GS marked for I.T.E. safety **Mexico:** NOM-NYCE **Australia/NZ:** C-Tick mark
MTBF:	per MIL-HDBK-217F Ground Benign exceeds 100,000 hours without aimer, 91,000 hours with aimer
Symbologies:	Codabar, Code 39 including PARAF, Interleaved 2 of 5, Code 2 of 5, Matrix 2 of 5, Code 11, Code 93, Code 128, UPC, EAN/JAN, China Post, GS1 DataBar, and ISBT 128 Concatenation (requires a paid license).
Interfaces:	All popular PCs and terminals via keyboard wedge, keyboard replacement/direct connect, TTL level RS-232, TTL level Serial Wedge, USB, wand emulation, HHLC non-decoded laser compatible, True RS-232, IBM 468x, and IBM469x.
Warranty:	Three-year factory warranty.

*Not available in Europe; non-RoHS compliant

Automation and Control Solutions
Honeywell
Imaging and Mobility
700 Visions Drive
PO Box 208
Skaneateles Falls, NY 13153-0208
www.honeywell.com/aidc

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