

# 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

erformance					Ranges for the 3800i
Illumination:	630 nM Visible Re	d LED		Narrow Width	Depth of Field (300 Lux Lighting)
Receiving Device:	3648 element linear imager			7.5 mil	6.5 - 15 in. (16.5 - 38 cm)
Reading Width:	15 mil. code, 15 in. (38.1 cm) from nose, 10 in. (25.4 cm) wide			100% UPC	2.5 - 28 in. (6.4 - 71 cm)
Resolution:	7.5 mil. at 9 in. (22.9 cm) distance			15 mil	2.5 - 31 in. (6.4 - 78.7 cm)
Skew Angle:	±65°			20 mil	1.5 - 42 in. (3.8 - 107 cm)
Pitch Angle:	±65°			55 mil	4.0 - 82 in. (10.2 - 208 cm)
Horizontal Velocity:	2 in. (5.1 cm) per s	econd			
Minimum Symbol Contrast:	20%				
Scan Rate:	Up to 270 scans p	er second			
Decode Rate:	270 decodes per s	econd			
/lechanical/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):	<u>Input</u> 5V	Scanning 235mA	<u>Idle</u> 68mA		
	12V	142mA	49mA		
ower Supply					
Power Supply	12V	142mA	49mA		
Noise Rejection:		142mA	49mA		
Noise Rejection: Invironmental	12V Maximum 100mV	142mA peak to peak, 10	49mA		
Noise Rejection:  Invironmental  Operating Temperature:	12V  Maximum 100mV  -22°F to +122°F (-3	142mA  peak to peak, 10  30°C to +50°C)	49mA		
Noise Rejection:  nvironmental  Operating Temperature:  Storage Temperature:	12V  Maximum 100mV  -22°F to +122°F (-3-40°F to +140°F (-4-40°F to +14	142mA  peak to peak, 10  30°C to +50°C)  40°C to +60°C)	49mA		
Noise Rejection:  Invironmental  Operating Temperature:  Storage Temperature:  Humidity:	12V  Maximum 100mV  -22°F to +122°F (-3-40°F to +140°F (-40°F to +140°F)  0 to 95%, non-con	142mA  peak to peak, 10  80°C to +50°C)  40°C to +60°C)  densing	49mA		
Noise Rejection:  Invironmental Operating Temperature: Storage Temperature: Humidity: Sealing:	12V  Maximum 100mV  -22°F to +122°F (-40°F to +140°F (-40°F to +140°F), non-con IP54 (water and do	peak to peak, 10  30°C to +50°C)  40°C to +60°C)  densing  ust resistant)	49mA to 100 kHz		
Noise Rejection:  Invironmental Operating Temperature: Storage Temperature: Humidity: Sealing: Mechanical Shock:	12V  Maximum 100mV  -22°F to +122°F (-3-40°F to +140°F (-4-0 to 95%, non-con IP54 (water and di Operational after 5	peak to peak, 10  30°C to +50°C)  40°C to +60°C)  densing  ust resistant)	49mA		
Noise Rejection:  Invironmental Operating Temperature: Storage Temperature: Humidity: Sealing: Mechanical Shock: Ambient Illumination:	12V  Maximum 100mV  -22°F to +122°F (-3-40°F to +140°F (-4-40°F), non-con IP54 (water and do Operational after 5 0 - 70,000 lux	peak to peak, 10  30°C to +50°C)  40°C to +60°C)  densing  ust resistant)  60 drops from 6.5	49mA to 100 kHz		
Noise Rejection:  Invironmental Operating Temperature: Storage Temperature: Humidity: Sealing: Mechanical Shock: Ambient Illumination: ESD Protection:	Maximum 100mV  -22°F to +122°F (-3)  -40°F to +140°F (-4)  0 to 95%, non-con  IP54 (water and di  Operational after 5  0 - 70,000 lux  Functional after 15	peak to peak, 10  30°C to +50°C)  40°C to +60°C)  densing  ust resistant)  60 drops from 6.5	49mA to 100 kHz		
Noise Rejection:  Invironmental Operating Temperature: Storage Temperature: Humidity: Sealing: Mechanical Shock: Ambient Illumination: ESD Protection: LED Classification:	Maximum 100mV  -22°F to +122°F (-3)  -40°F to +140°F (-4)  0 to 95%, non-con  IP54 (water and do  Operational after 5  0 - 70,000 lux  Functional after 15  Class 1 under EN6	peak to peak, 10 30°C to +50°C) 40°C to +60°C) densing ust resistant) 0 drops from 6.5 6kV discharge	to 100 kHz  ft. (2 m) to concrete		
Noise Rejection:  Invironmental Operating Temperature: Storage Temperature: Humidity: Sealing: Mechanical Shock: Ambient Illumination: ESD Protection:	Maximum 100mV  -22°F to +122°F (-3 -40°F to +140°F (-4 0 to 95%, non-con IP54 (water and di Operational after 5 0 - 70,000 lux Functional after 15 Class 1 under EN6 Class 2 under 21 0	peak to peak, 10  30°C to +50°C)  40°C to +60°C)  densing  ust resistant)  60 drops from 6.5  6kV discharge  50825-01  CFR 1040.10 and	to 100 kHz  ft. (2 m) to concrete		
Noise Rejection:  Invironmental Operating Temperature: Storage Temperature: Humidity: Sealing: Mechanical Shock: Ambient Illumination: ESD Protection: LED Classification: Laser Classification	Maximum 100mV  -22°F to +122°F (-3 -40°F to +140°F (-4 0 to 95%, non-con IP54 (water and di Operational after 5 0 - 70,000 lux Functional after 15 Class 1 under EN6 Class 2 under 21 0	peak to peak, 10 30°C to +50°C) 40°C to +60°C) densing ust resistant) 0 drops from 6.5 6kV discharge 60825-01 CFR 1040.10 and 650 nM, EN6082	49mA  to 100 kHz  ft. (2 m) to concrete		
Noise Rejection:  Invironmental Operating Temperature: Storage Temperature: Humidity: Sealing: Mechanical Shock: Ambient Illumination: ESD Protection: LED Classification Laser Classification Aimer Beam only*:	Maximum 100mV  -22°F to +122°F (-3) -40°F to +140°F (-4) 0 to 95%, non-con IP54 (water and do Operational after 5 0 - 70,000 lux Functional after 15 Class 1 under EN6 Class 2 under 21 ( 1mW max output, Withstands 5G pea International: CB 60950-1 Canada: EN55022 Class B,	142mA  peak to peak, 10  30°C to +50°C)  40°C to +60°C)  densing  ust resistant)  do drops from 6.5  kV discharge  50825-01  CFR 1040.10 and  650 nM, EN6082  ak from 22 to 300  s scheme to IEC6  ICES-003 Class  EN55024, EN61	49mA  to 100 kHz  ft. (2 m) to concrete  d 1040.11 /5-1: 1994+A11+A2  D Hz  60950-1 & IEC60825-1 Class 1 LE /B. cUL listed to CSA C22.2 No. 6	0950-1-03 Europe: C	E 2004/108/EC EMC Directive to
Noise Rejection:  Invironmental Operating Temperature: Storage Temperature: Humidity: Sealing: Mechanical Shock: Ambient Illumination: ESD Protection: LED Classification: Laser Classification Aimer Beam only*: Vibration:	Maximum 100mV  -22°F to +122°F (-3) -40°F to +140°F (-4) 0 to 95%, non-con IP54 (water and do Operational after 5 0 - 70,000 lux Functional after 15 Class 1 under EN6 Class 2 under 21 ( 1mW max output, Withstands 5G pea International: CB 60950-1 Canada: EN55022 Class B, I.T.E. safety Mexic	142mA  peak to peak, 10  30°C to +50°C)  40°C to +60°C)  densing  ust resistant)  do drops from 6.5  kV discharge  50825-01  CFR 1040.10 and  650 nM, EN6082  ak from 22 to 300  s scheme to IEC6  ICES-003 Class  EN55024, EN61  co: NOM-NYCE	49mA  to 100 kHz  ft. (2 m) to concrete  d 1040.11 /5-1: 1994+A11+A2  D Hz  60950-1 & IEC60825-1 Class 1 LE /B. cUL listed to CSA C22.2 No. 6  000-3-2, EN61000-3-3. 2006/95/	0950-1-03 <b>Europe:</b> C EC Low Voltage Directi	E 2004/108/EC EMC Directive to tve <b>GS Mark:</b> TUV GS marked for
Noise Rejection:  Invironmental Operating Temperature: Storage Temperature: Humidity: Sealing: Mechanical Shock: Ambient Illumination: ESD Protection: LED Classification Laser Classification Aimer Beam only*: Vibration: Agency:	Maximum 100mV  -22°F to +122°F (-40°F to +140°F to +140°F to +140°F (-40°F to +140°F t	peak to peak, 10  30°C to +50°C) 40°C to +60°C) densing ust resistant) do drops from 6.5  6kV discharge 68825-01  CFR 1040.10 and 650 nM, EN6082 a scheme to IEC6 ICES-003 Class EN55024, EN61 co: NOM-NYCE 7F Ground Benig including PARAI	49mA  to 100 kHz  ft. (2 m) to concrete  1 1040.11 15-1: 1994+A11+A2  0 Hz 10950-1 & IEC60825-1 Class 1 LE B. cUL listed to CSA C22.2 No. 6 000-3-2, EN61000-3-3. 2006/95/I Australia/NZ: C-Tick mark In exceeds 100,000 hours without	0950-1-03 <b>Europe</b> : C EC Low Voltage Directi aimer, 91,000 hours w Matrix 2 of 5, Code 11,	E 2004/108/EC EMC Directive to tve <b>GS Mark:</b> TUV GS marked for
Noise Rejection:  Invironmental Operating Temperature: Storage Temperature: Humidity: Sealing: Mechanical Shock: Ambient Illumination: ESD Protection: LED Classification: Laser Classification Aimer Beam only*: Vibration: Agency:	Maximum 100mV  -22°F to +122°F (-3°C) -40°F to +140°F (-4°C) 0 to 95%, non-con IP54 (water and do Operational after 50°C) 0 - 70,000 lux Functional after 15°C lass 1 under EN6°C Class 2 under 21°C 1mW max output, Withstands 5G pea International: CB 60950-1 Canada: EN55022 Class B, I.T.E. safety Mexic per MIL-HDBK-21°C Codabar, Code 39 China Post, GS1 E All popular PCs ar	peak to peak, 10  30°C to +50°C)  40°C to +60°C)  densing  ust resistant)  do drops from 6.5  kV discharge  50825-01  CFR 1040.10 and  650 nM, EN6082  ak from 22 to 300  created by the control of the c	49mA  to 100 kHz  ft. (2 m) to concrete  d 1040.11 /5-1: 1994+A11+A2  D Hz  60950-1 & IEC60825-1 Class 1 LE /B. cUL listed to CSA C22.2 No. 6  000-3-2, EN61000-3-3. 2006/95/I Australia/NZ: C-Tick mark in exceeds 100,000 hours without  F, Interleaved 2 of 5, Code 2 of 5, I	0950-1-03 Europe: C EC Low Voltage Directi aimer, 91,000 hours w Matrix 2 of 5, Code 11, aid license).	E 2004/108/EC EMC Directive to ve <b>GS Mark</b> : TUV GS marked for ith aimer Code 93, Code 128, UPC, EAN/J TL level RS-232, TTL level Serial

<sup>\*</sup>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

