

## Honeywell

# Granit 1980i

## Industrial-Grade Full-Range Area-Imaging Scanner

The Granit<sup>™</sup> 1980i industrial-grade scanner features full-range area-imaging technology capable of reading both 1D and 2D barcodes across a wide range of distances. From poor quality 2 mil codes scanned at close range, to 100 mil codes hanging from warehouse rafters scanned at ranges of 52 feet (16m), the 1980i is built to perform. With an unmatched range that provides incredible versatility, Granit enables maximum operator productivity in the harshest environments.

The 1980i is packed with technologies that make it simple to use. An integrated laser pointer aiming system with auto-illumination, omni-directional reading capability, and support for centering take the guesswork out of scanning at extended ranges. Operators of fork trucks equipped with vehicle-mounted mobile computers, such as the Honeywell Thor<sup>™</sup> series, will appreciate how the full-range scanning capability of 1980i allows them to remain seated—and hence more productive—while scanning pallets at extended ranges.

As a member of the Granit family of scanners, the 1980i is built to withstand the varied demands of harsh working environments. Utilizing the Granit housing that has long set the standard for scanner reliability, the 1980i is rated IP65 and is built to survive 5,000 tumbles from 3.2 feet (1m) and 50 drops to concrete from 6.5 feet (2m)—even in temperatures as low as -22°F (-30°C). As a result, operations that deploy Granit scanners can expect to experience minimal device downtime and a lower overall cost of ownership.



#### Features

- Full-Range Area-Imaging Performance: Scans low density (100 mil) codes out to 52 feet (16 m) and high density (2 mil) codes at close range—and everything in between.
- **Built Granit Tough:** Tested to withstand the toughest environments, Granit is rated IP65 and can withstand 5,000 tumbles from 3.2 ft (1 m) and 50 drops to concrete from 6.5 ft (2 m).
- **Easy to Use:** A laser-spot aimer, omni-directional scanning, and features such as centering take the guesswork out of scanning at extended ranges.
- Industrial Grade Cable Option: Tested to withstand 300,000 90-degree bends at temperatures as low as -22°F (-30°C). Continues to communicate when up to 60 pounds of force is applied.
- **Single Scanning Solution:** Can replace and consolidate multiple purpose-built scanners in typical distribution center and warehouse environments.

## **Granit 1980i Technical Specifications**

Mechanical			
Dimensions (LxWxH)	133 mm x 75 mm x 195 mm (5.2" x 2.9" x 7.6")		
Weight	335 g (11.8 oz)		
Electrical			
Input Voltage	4.0 to 5.5 VDC		
Operating Power	2.35 W (470 mA @ 5.0 V)		
Standby Power	0.5 W (100 mA @ 5.0 V)		
Host System Interfaces	USB and True RS232		
Environmental			
Operating Temperature	-30°C to 50°C (-22°F to 122°F)		
Storage Temperature	-40°C to 70°C (-40°F to 158°F)		
Humidity	0 to 95% relative humidity, non-condensing		
Drop	Designed to withstand 50 2m (6.5') drops to concrete at -30°C		
Tumble	5,000 1m (40') tumbles		
Environmental Sealing	IP65		
Light Levels	0 to 100,000 lux (9,290 foot-candles)		
ESD	±20Kv air discharge, ±8kV contact discharge		
Scan Performance			
Scan Pattern	Area Imager		
Scan Angle	Horizontal: 12.9° Vertical: 8°		
Symbol Contrast	1D Codes: 30% minimum reflectance difference 2D Codes: 40% minimum reflectance difference		
Min. Resolution	1D & 2D Codes: 2 mil		
Pitch, Skew	70°, 80°		
Warranty	3 year factory warranty		

Refer to the Honeywell Scanning & Mobility Compliance Center (<u>www.honeywellaidc.com/compliance</u>) to review and download any publicly available documentation pertaining to the certification of this product in a given country.

Refer to the Honeywell Scanning & Mobility Supported Symbologies Datasheet (<u>www.honeywellaidc.com/symbologies</u>) for a complete listing of all supported bar code symbologies.

Specifications are subject to change without notice.

LASER LIGHT- DO NOT STARE INTO BEAM CLASS 2 LASER PRODUCT. 镭射光,請勿直視鐳射光束,等級2鐳射產品, RAYONNEMENT LASER NE PAS REGARDER DANS LE FAISCEAU. APPAREIL À LASER DE CLASSE 2. MAX. 1mW: 630-680 nm IEC 60825-1:2007. Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.

Symbology	Barcode Narrow Width	Depth of Field (Typical*)
Code 39	7.5 mil	10.0 - 164.9 cm (3.9 - 64.9 in)
	10 mil	10.0 - 216 cm (3.9 - 85.0 in)
	20 mil	15.2 - 434.5 cm (6.0 - 171.0 in)
	40 mil	36.4 - 989.1 cm (14.3 - 389.4 in)
	55 mil	52.2 - 1322.4 cm (20.5 - 520.6 in)
	100 mil	103.4 - 1600 cm (40.7 - 629.9 in)
EAN/UPC	13 mil	12.2 - 229.8 cm (4.8 - 90.5 in)
DataMatrix	7.5 mil	10.0 - 75.9 cm (3.9 - 29.9 in)
	10 mil	10.0 - 102.3 cm (3.9 - 40.3 in)
	55 mil	42.8 - 591.3 cm (16.9 - 232.8 in)
	100 mil	80.7 - 1032.5 cm (31.8 - 406.5 in)

\*Performance may be impacted by bar code quality and environmental conditions.

#### For more information:

www.honeywellaidc.com

#### **Honeywell Scanning & Mobility**

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### Industrial Scanners



## Granit 1981i

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THE POWER OF CONNECTED

Wireless Industrial-Grade Full-Range Area-Imaging Scanner

The Granit<sup>™</sup> 1981i wireless industrial-grade scanner features fullrange area-imaging technology capable of reading both 1D and 2D barcodes across a wide range of distances. From poor-quality 2 mil codes scanned at close range to 100 mil codes hanging from warehouse rafters scanned at ranges of 52 feet (16m), the Granit 1981i scanner is built to perform. With an unmatched range and wireless freedom providing incredible versatility, the Granit 1981i scanner enables maximum operator productivity in the harshest environments.

The Granit 1981i scanner is packed with technologies that make it simple to use. An integrated laser pointer aiming system with auto-illumination, omnidirectional reading capability and support for centering take the guesswork out of scanning at extended ranges. Operators of fork trucks equipped with vehicle-mounted mobile computers, such as the Honeywell Thor<sup>™</sup> series, will appreciate how the full-range scanning capability of the Granit 1981i scanner allows them to remain seated – and hence more productive – while scanning pallets at extended ranges. And with Bluetooth<sup>®</sup> technology, complete freedom of movement up to 100 m (330 ft) away provides additional operator convenience.

As a member of the Granit family of scanners, the Granit 1981i scanner is built to withstand the varied demands of harsh working environments. Incorporating the Granit housing that has long set the standard for scanner reliability, the Granit 1981i scanner is rated IP65 and is built to survive 5,000 tumbles from 1 m (3.3 ft) and 50 drops to concrete from 2 m (6.5 ft) – even in temperatures as low as -20°C (-4°F). As a result, operations that deploy Granit scanners can expect to experience minimal device downtime and a lower overall cost of ownership.



The Granit 1981i wireless area-imaging scanner takes the guesswork out of extended-range scanning, with the ability to read 1D and 2D barcodes from 15 cm (6 in) to 16 m (52 ft).

### FEATURES & BENEFITS



The Granit 1981i scanner scans low-density (100 mil) codes out to 16 m (52 ft) and high-density (2 mil) codes at close range – and everything in between.



Tested to withstand the toughest environments, the Granit 1981i scanner is rated IP65 and can withstand 5,000 tumbles from 1 m (3.3 ft) and 50 drops to concrete from 2 m (6.5 ft).



A laser-spot aimer, omnidirectional scanning and features such as centering take the guesswork out of scanning at extended ranges.



Bluetooth wireless technology provides freedom of movement up to 100 m (330 ft) from the base and reduces interference with other wireless systems.



The Granit 1981i scanner can replace and consolidate multiple purpose-built scanners in typical distribution center and warehouse environments, providing a single scanning solution.

## Granit 1981i Technical Specifications

#### WIRELESS

**Radio/Range:** 2.4 GHz to 2.5 GHz (ISM Band) Adaptive Frequency Hopping; Bluetooth v2.1: Class 1: 100 m (330 ft) line of sight

Data Rate (Transmission Rate): Up to 1 Mbps Number of Scans: At least 7,200 (1 scan every 4 seconds for 8 hours)

Expected Hours of Operation: 8 hours Expected Charge Time: 4.5 hours (with external power supply on charger) Battery: 2400 mAh Li-Ion minimum

#### MECHANICAL/ELECTRICAL

Dimensions (L x W x H): Scanner (1981iFR-3): 133 mm x 75 mm x 195 mm (5.2 in x 2.9 in x 7.6 in)

Charger/Communication Base (CCB05-100BT-07N):  $250 \text{ mm} \times 103 \text{ mm} \times 65 \text{ mm}$  $(9.9 \text{ in} \times 4.1 \text{ in} \times 2.6 \text{ in})$ 

Weight:

Scanner: 420 g (14.8 oz)

Charger/Communication Base: 290 g (10.2 oz)

Operating Power:

Scanner: N/A

Charger/Communication Base: 5 W (1A @ 5 V)

Non-Charging Power:

Scanner: N/A Charger/Communication Base: 0.6 W (0.12A @ 5 V)

Host System Interfaces:

Scanner: N/A

Charger/Communication Base: USB, Keyboard Wedge, RS-232 TTL

#### ENVIRONMENTAL

Operating Temperature: Scanner: -20°C to 50°C (-4°F to 122°F) Charger/Communication Base: -20°C to 50°C (-4°F to 122°F)

Storage Temperature with Battery:

Scanner: -40°C to 70°C (-40°F to 158°F) Charger/Communication Base: -40°C to 70°C (-40°F to 158°F)



#### For more information

www.honeywellaidc.com

#### **Honeywell Safety and Productivity Solutions**

9680 Old Bailes Road Fort Mill, SC 29707 800-582-4263 www.honeywell.com

#### Humidity:

**Scanner:** Up to 95% relative humidity, non-condensing

**Charger/Communication Base:** Up to 95% relative humidity, non-condensing

#### Drop:

Scanner: Designed to withstand 50 2 m (6.5 ft) drops to concrete at -20°C (-4°F)

Charger/Communication Base: Designed to withstand 50 1.2 m (4 ft) drops to concrete at -20°C (-4°F)

#### Tumble:

Scanner: 5,000 1 m (3.3 ft) tumbles Charger/Communication Base: 5,000 1 m (3.3 ft) tumbles

Environmental Sealing:

#### Scanner: IP65

Charger/Communication Base: IP51 Light Levels:

Seenner Oto 1

Scanner: 0 to 100,000 lux (9,290 foot-candles) Charger/Communication Base: N/A

#### ESD:

Scanner: ±20 kV air discharge, ±8 kV contact discharge Charger/Communication Base): ±20 kV air discharge, ±8 kV contact discharge

#### SCAN PERFORMANCE

Scan Pattern: Area Image

#### Scan Angle:

Horizontal: 12.9°

#### Vertical: 8° Symbol Contrast:

1D Codes: 30% minimum reflectance difference 2D Codes: 40% minimum reflectance difference Min. Resolution: 1D & 2D Codes: 2 mil

#### Pitch, Skew: 70°, 80°

**Warranty:** 3-year factory warranty (Note: Battery warranty is 1-year.)

SYMBOLOGY	BARCODE NARROW WIDTH	DEPTH OF FIELD (TYPICAL*)
CODE 39	7.5 mil	10.0 cm – 164.9 cm (3.9 in – 64.9 in)
	10 mil	10.0 cm – 216 cm (3.9 in – 85.0 in)
	20 mil	15.2  cm - 434.5  cm (6.0  in - 171.0  in)
	40 mil	36.4 cm – 989.1 cm (14.3 in – 389.4 in)
	55 mil	$52.2\ \text{cm}$ – 1322.4 cm (20.5 in – 520.6 in)
	100 mil	103.4  cm - 1600  cm (40.7  in - 629.9  in)
EAN/UPC	13 mil	12.2 cm – 229.8 cm (4.8 in – 90.5 in)
DATAMATRIX	7.5 mil	10.0 cm - 75.9 cm (3.9 in - 29.9 in)
	10 mil	10.0  cm - 102.3  cm (3.9  in - 40.3  in)
	55 mil	42.8 cm - 591.3 cm (16.9 in - 232.8 in)
	100 mil	80.7 cm – 1032.5 cm (31.8 in – 406.5 in)

\* Performance may be impacted by barcode quality and environmental conditions.

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For a complete listing of all supported barcode symbologies, please visit www.honeywellaidc.com/ symbologies.

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