

Granit 1981i

Wireless Industrial-Grade Full-Range Area-Imaging Scanner

The Granit™ 1981i wireless 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 (0.05 mm) codes scanned at close range to 100 mil (2.54 mm) codes hanging from warehouse rafters scanned at ranges of 52 feet (16 m), the 1981i is built to perform. With an unmatched range and wireless freedom providing incredible versatility, Granit enables maximum operator productivity in the harshest environments.

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

As a member of the Granit family of scanners, the 1981i 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 1981i is rated IP65 and is built to survive 5,000 tumbles from 3.2 feet (1 m) and 50 drops to concrete from 6.5 feet (2 m) – even in temperatures as low as -4°F (-20°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, or 2.54 mm) codes out to 52 ft (16 m) and high density (2 mil, or 0.051 mm) 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 feet (1 m) and 50 drops to concrete from 6.5 ft (2 m).
- **Easy to Use:** A laser-spot aimer, omnidirectional scanning and features such as centring take the guesswork out of scanning at extended ranges.
- **Efficient Wireless Performance:** Bluetooth™ wireless technology provides freedom of movement up to 330 ft (100 m) from base and reduces interference with other wireless systems.
- **Single Scanning Solution:** Can replace and consolidate multiple purpose-built scanners in typical distribution centre and warehouse environments.

Granit 1981i Technical Specifications

Wireless

Radio/Range	2.4 to 2.5 GHz (ISM Band) Adaptive Frequency Hopping Bluetooth v2.1: Class 1: 100 m (330') line of sight
Data Rate (Transmission Rate)	Up to 1 Mbps
Number of Scans	At least 7200 (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	2000 mAh Li-ion minimum

Mechanical/Electrical

Scanner (1981iFR-3)

Charger/Communication Base (CCB05-100BT-07N)

Dimensions (LxWxH)	133 mm x 75 mm x 195 mm (5.2" x 2.9" x 7.6")	250 mm x 103 mm x 65 mm (9.9" x 4.1" x 2.6")
Weight	420 g (14.8 oz)	290 g (10.2 oz)
Operating Power (Charging)	N/A	5 W (1 A @ 5 V)
Non-Charging Power	N/A	0.6 W (0.12 A @ 5 V)
Host System Interfaces	N/A	USB, Keyboard Wedge, RS232 TTL

Environmental

Scanner (1981iFR-3)

Charger/Communication Base (CCB05-100BT-07N)

Operating Temperature	-20°C to 50°C (-4°F to 122°F)	-20°C to 50°C (-4°F to 122°F)
Storage Temperature with battery	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)
Humidity	0 to 95% relative humidity, non-condensing	0 to 95% relative humidity, non-condensing
Drop	Designed to withstand 50 2 m (6.5') drops to concrete at -20°C (-22°F)	Designed to withstand 50 1.2-metre drops to concrete at -20°C (-22°F)
Tumble	5,000 1-metre (40") tumbles	5,000 1-metre (40") tumbles
Environmental Sealing	IP65	IP51
Light Levels	0 to 100,000 lux (9,290 foot-candles)	N/A
ESD	±20 kV air discharge, ±8 kV contact discharge	±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 (0.051 mm)
Pitch, Skew	70°, 80°
Warranty	3-year factory warranty (note: battery warranty is 1 year)

Refer to the Honeywell Scanning & Mobility Compliance Centre (www.honeywellaidc.com/compliance) 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 (www.honeywellaidc.com/symbologies) for a complete listing of all supported barcode symbologies.

Specifications are subject to change without notice.



Symbology	Barcode Narrow Width	Depth of Field (Typical*)
Code 39	7.5 mil (0.191 mm)	10.0 – 164.9 cm (3.9 – 64.9 in)
	10 mil (0.254 mm)	10.0 – 216 cm (3.9 – 85.0 in)
	20 mil (0.508 mm)	15.2 – 434.5 cm (6.0 – 171.0 in)
	40 mil (1.016 mm)	36.4 – 989.1 cm (14.3 – 389.4 in)
	55 mil (1.397 mm)	52.2 – 1322.4 cm (20.5 – 520.6 in)
EAN/UPC	100 mil (2.54 mm)	103.4 – 1600 cm (40.7 – 629.9 in)
	13 mil (0.33 mm)	12.2 – 229.8 cm (4.8 – 90.5 in)
DataMatrix	7.5 mil (0.191 mm)	10.0 – 75.9 cm (3.9 – 29.9 in)
	10 mil (0.254 mm)	10.0 – 102.3 cm (3.9 – 40.3 in)
	55 mil (1.397 mm)	42.8 – 591.3 cm (16.9 – 232.8 in)
	100 mil (2.54 mm)	80.7 – 1032.5 cm (31.8 – 406.5 in)

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

For more information:

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