

## 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 codes scanned at close range to 100 mil codes hanging from warehouse rafters scanned at ranges of 52 feet (16m), 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 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™ 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 meters) 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 (1m) and 50 drops to concrete from 6.5 feet (2m)—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) codes out to 52 ft (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.
- **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 center 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: 100m (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<br>(1981iFR-3)                       | Charger/Communication Base<br>(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 65mm (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 (1A @ 5V)                                   |
| Non-Charging Power         | N/A                                          | 0.6 W (0.12A @ 5 V)                             |
| Host System Interfaces     | N/A                                          | USB, Keyboard Wedge, RS232 TTL                  |

| Environmental                    | Scanner<br>(1981iFR-3)                                         | Charger/Communication Base<br>(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 | Designed to withstand 50.12 m (4') drops to concrete at -20°C |
| Tumble                           | 5,000 1m (40') tumbles                                         | 5,000 1m (40') tumbles                                        |
| Environmental Sealing            | IP65                                                           | IP51                                                          |
| Light Levels                     | 0 to 100,000 lux (9,290 foot-candles)                          | N/A                                                           |
| ESD                              | ±20Kv air discharge, ±8kV contact discharge                    | ±20Kv air discharge, ±8kV contact discharge                   |

## Scan Performance

|                 |                                                                                              |
|-----------------|----------------------------------------------------------------------------------------------|
| Scan Pattern    | Area Image                                                                                   |
| Scan Angle      | Horizontal: 12.9°<br>Vertical: 8°                                                            |
| Symbol Contrast | 1D Codes: 30% minimum reflectance difference<br>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)                                   |

Refer to the Honeywell Scanning & Mobility Compliance Center ([www.honeywellaidc.com/compliance](http://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 Symbolologies Datasheet ([www.honeywellaidc.com/symbolologies](http://www.honeywellaidc.com/symbolologies)) for a complete listing of all supported bar code symbolologies.

Specifications are subject to change without notice.



| 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.

## DeltaOne Software

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