

# GRANIT™ ULTRA 2100iXR

Ultra-Rugged Area-Imaging Expanded Range Scanner

Honeywell Granit Ultra scanners expand capabilities and define the next generation of ultra-rugged scanning.

## ULTRA SCAN PERFORMANCE

For a scanner to optimize productivity, it should read and transmit common barcodes nearly as fast as the user can pull the trigger. Granit Ultra is engineered to do just that. Damaged or low quality printed barcodes can cause many scanners' pace to decrease, or even force cumbersome (and error-prone) manual data entry. To maximize throughput, scanners must successfully compensate for poor code quality before scan delays put pressure on production.

Granit Ultra integrates high speed processing, AI algorithms, and decoding enhancements to result in an average 45% scanning speed increase vs. Granit XP\*, enabling improved productivity. XR models scan rapidly from at or near contact up to 33' for 100 mil Code 39 rack labels, or nearly 6' (1.8m) with UPC codes, enabling reduced walking or stooping to read codes at greater distances for improved ergonomics and productivity.

## ULTRA DURABILITY

In modern warehouse, distribution center, and manufacturing environments, any scanner must be durable enough to survive harsh operating conditions and powerful enough to capture and transmit barcode data without slowing workflows. Under exactly that kind of rough treatment, Honeywell Granit Ultra is ready to deliver. 10' drops from fork trucks, docks, and picking trucks, 7,500 tumbles from 3'/1m (typical working height), and wide operating temperatures from deep freezers to the heat of summer are no problem.

But great specs alone are meaningless if there are other weak links in the chain. For instance, customers often cite scratched and broken scan windows as a frequent failure point in competitive scanners. Honeywell Granit Ultra's small, deeply recessed, scratch- and impact-resistant scan window is designed to address this, helping ensure that the electronics and optics remain IP65/68 protected. Scanner cables are another commonly reported failure point for other brands. Honeywell's rigorous specifications on scanner cables (including 500K cycle flex, weighted pull, and even deep freezer specific versions tested to 300K flexes at a frigid -30C/-22F) ensure that each link in the data chain offers premium reliability.

**To learn more about how Granit Ultra is ready to improve your operations, contact your Honeywell representative or partner today.**



*Granit™ Ultra 2100iXR Scanner*

\*Honeywell standard benchmarking testing conducted on Granit Ultra SR and XR models vs. Granit XP on 6 collections of reference barcodes.

## ULTRA EASE OF USE

Ready to operate right out of the box for many applications, Granit offers easy custom configuration in the time it takes to scan a barcode. Comfortable ergonomic design compliments the human hand and is readily compatible with the full range of users. Crisply focused illumination intuitively defines the field of view, and a sharp aimer defines the focal point and can be used for precise code targeting in applications where many barcodes are located in close proximity. And for workflows better expedited by reading many barcodes at once, Granit can read multiple codes in the field of view, organizing and outputting the data in a predefined order using Honeywell's Data Format Editor.

## FEATURES AND BENEFITS



### BUILT TO LAST

Built to survive harsh treatment including 3m (10ft) drops, 7500 1m (3.3ft) tumbles, operating temperatures from -30°C to 50°C (-22°F to 122°F), and IP65/68 sealing, Granit Ultra is engineered to reduce service costs and increases device uptime.



### FAST SCANNING

Granit Ultra provides rapid scanning, even on damaged and low quality barcodes. High quality barcodes transmit faster than ever.



### CLOSE PROXIMITY

XR model is ideally suited to near and mid-field scanning operations on 1D and 2D barcodes. For arms-length only scanning, or to read even longer reading distances, refer to SR or XLR models in the Granit family.



### HOLISTIC SOLUTION

The Honeywell Scanner Management Utility (SMU) creates a holistic solution that automates how you deploy and update the scanners in your environment.

## TECHNICAL SPECIFICATIONS

TABLE 1. MECHANICAL

Characteristic	Parameter
Dimensions (L x W x H)	194.8mm x 75.8mm x 139.5mm (7.7 in x 3.0 in x 5.5 in)
Weight – Corded	330g (11.64 oz)
User Indicators	Good decode LEDs, Beeper (adjustable tone and volume), Vibration (adjustable)

TABLE 2. ELECTRICAL

Characteristic	Parameter
Input Voltage	4.4 to 5.5 VDC
Operating Power (USB 2.0) – Corded	2.15W (430mA @ 5VDC) RMS
Operating Power (Other interfaces) Corded:	2.75W (550mA @ 5VDC) RMS
Standby Power – Corded	0.875W (175mA @ 5VDC) RMS
Host System Interfaces	USB, RS-232 TTL (cables available to convert for +/-12V True use), Keyboard Wedge

# GRANIT ULTRA 2100ISR Technical Specifications

**TABLE 3. ENVIRONMENTAL**

Characteristic	Parameter
Operating Temperature – Corded*	-30°C to 50°C (-22°F to 122°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Humidity	Up to 95% relative humidity, non-condensing
Drop	3m (10 ft): MIL-STD-810G, 25C (77°F), 55% RH
	2.5m (8 ft): 20 drops from -30°C to 50°C (-22°F to 122°F), uncontrolled RH
	2m (6.5 ft): 50 drops from -30°C to 50°C (-22°F to 122°F), uncontrolled RH
Tumble	7,500 1m (3.3ft) tumbles
Environmental Sealing: Scanner	IP65 and IP68
Light Levels	0 to 100,000 lux (9,290 foot-candles)
ESD	Up to +/-20KV air discharge, +/-8kV contact discharge, +/-8kV indirect coupling plane

**TABLE 4. SCAN PERFORMANCE**

Characteristic	Parameter
Scan Pattern	Area imager (1280 × 1080 pixel array)
Illumination	Yellow-green LED
Aimer	520nm laser
Motion Tolerance	Up to 4 m/s (157 in/s)
Scan Angle	Horizontal: 42°, Vertical 36°
Print Contrast	As low as 15%
Minimum Barcode Element Resolution	2.5 mil 1D, 5 mil 2D
Roll, Pitch, Skew	+/-360°, 65°, 65°
Decode Capabilities	Reads standard 1D, PDF, 2D, Postal, Digimarc, DOT Code, and OCR symbologies
Image Capture	Up to 109PPI on an A4 document
Warranty – Scanner	Three year factory warranty

**TABLE 5. TYPICAL PERFORMANCE\*\***

Symbology	Standard Range – Typical		Standard Range – Guaranteed	
	Near Distance (mm [in])	Far Distance (mm [in])	Near Distance (mm [in])	Far Distance (mm [in])
5 mil C39	10 [0.39]	269 [10.59]	21 [0.83]	252 [9.92]
10 mil C128	0 [0.0]	1503 [59.17]	0 [0.0]	1455 [57.28]
13 mil UPC	0 [0.0]	1780 [70.08]	0 [0.0]	1586 [62.44]
20 mil C128	0 [0.0]	2812 [110.71]	0 [0.0]	2621 [103.19]
100 mil C39	0 [0.0]	10848 [427.09]	0 [0.0]	9242 [363.86]
6.7 mil PDF417	14 [0.55]	243 [9.57]	23 [0.91]	233 [9.17]
10 mil DataMatrix	5 [0.20]	261 [10.28]	14 [0.55]	247 [9.72]
20 mil QR Code	0 [0.0]	1464 [57.64]	0 [0.0]	1415 [55.71]
100 mil DataMatrix	0 [0.0]	5329 [209.80]	0 [0.0]	4724 [185.98]

\*With industrial-grade cable ordered separately.

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

## WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship during the applicable warranty period. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgment or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items that Honeywell, in its sole discretion, finds defective.

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## ADDITIONAL INFORMATION

- Integration Manual is available upon request; contact your Honeywell representative
- For a listing of common compliance approvals and certifications, visit our [website](#).

## NOTICE

### MISUSE OF DOCUMENTATION

- The information presented in this datasheet is for reference only. Do not use this document as a product installation guide
- An installation manual is available by request on our [website](#). Please contact your Honeywell sales representative

### For more information

[automation.honeywell.com](http://automation.honeywell.com)

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