# GRANIT™ ULTRA 2100i

**Ultra-Rugged Corded Area-Imaging Scanner** 

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, and Granit Ultra is engineered to do just that. Granit Ultra integrates high speed processing, Al(Artificial Intelligence) algorithms, and decoding enhancements to result in an average 45% scanning speed increase vs. Granit XP¹, enabling improved productivity.

## **ULTRA DURABILITY**

In modern warehouse, distribution center, and manufacturing environments, any scanner must be durable enough to survive harsh operating conditions. Under exactly that kind of rough treatment, Honeywell Granit Ultra is ready to deliver.

## **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. For further workflow improvement, Granit can also read multiple codes in the field of view, organizing and outputting the data in a predefined order using Honeywell's Data Format Editor.



Honeywell Granit Ultra 2100i Ultra-Rugged Scanner

## **SCAN MODELS**

SR (Standard Range) models are ready to read barcodes from contact to arms length

XR (Expanded Range) models are ready to read UPC/EAN13 from contact to nearly 6' (1.8m), or up to 33' (10.85m) for 100 mil Code 39

# **FEATURES AND BENEFITS**



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 reduces service costs and increases device uptime



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



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



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



# Granit Ultra 2100i Technical Specifications

#### **MECHANICAL**

 $\begin{array}{l} \textbf{Scanner dimensions (LxWxH):} \ 194.8 mm \\ \times \ 75.8 mm \times 139.5 mm (7.7 \ in \times 3.0 \ in \times 5.5 \ in) \end{array}$ 

 $\textbf{Scanner Weight:}\,330g\,(11.64\,\text{oz})$ 

**User Indicators:** Good decode LEDs, Beeper (adjustable tone and volume), Vibration (adjustable)

#### **ELECTRICAL**

Input Voltage: 4.0 VDC to 5.5 VDC
Operating Power: 2.15W (430mA @ 5VDC)
Standby Power: 0.875W (175mA @ 5VDC)
Host System Interfaces: USB, Keyboard Wedge,
RS-232 TTL (cables available to convert for +/-12V
True use)

### **ENVIRONMENTAL**

Operating Temperature: -30°C to 50°C

(-22°F to 122°F)

Storage Temperature:  $-40^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ 

 $(-40^{\circ}F$  to  $158^{\circ}F)$ 

**Humidity:** Up to 95% relative humidity,

Drop:

3m (10 ft): MIL-STD-810G, 25°C (77°F),

55% relative humidity

**2.5m (8.2 ft):** 20 drops from -30°C to 50°C (-22°F to 122°F), 55% relative humidity

 $2m\,(6.5\,ft):$   $50\,drops\,from$   $-30^{\circ}C$  to  $50^{\circ}C\,(-22^{\circ}F\,to\,122^{\circ}F),$  uncontrolled relative humidity

**Tumble:** 7,500 1m (3.3ft) tumbles **Vibration:** Withstands 5G peak from

5 to 300Hz

**Trigger activations:** Tested to 3 million cycles **Environmental Sealing:** IP65 and IP68

**Light Levels:** 0 to 100,000 lux (9.290 foot- candles)

**ESD:** +/-20KV air discharge, +/-8kV contact discharge, +/-8kV indirect coupling plane

#### SCAN PERFORMANCE

**Scan Pattern - SR:** Area imager (1280x1080 pixel array)

Scan Pattern -XR: Near and Far: Area imager (1280x1080 pixel array)

Illumination-SR: Warm White 2700K LED Illumination-XR: Yellow-Green LED

Aimer -SR: Green LED, 525nm peak wavelength

**Aimer-XR:** Green class 2 laser, 520nm peak wavelength

Motion Tolerance: Up to 4000 mm/s

Scan Angle (Field of View): SR: Horizontal: 42°, Vertical 36°

XR-Near: Horizontal: 42°, Vertical 36°
XR-Far: Horizontal: 16°, Vertical 14°
Print Contrast: As low as 15%

Roll, Pitch, Skew: +/-360°, +/-65°, +/-65° Minimum Barcode Resolution: 2.5 mil 1D,

mil 2D

Image Capture: Up to 109PPI on an A4 document Decode Capabilities<sup>2</sup>:

1D: Code 39, code 128, code 93, code 11, code 32 Pharmaceutical, EAN, UPC, codabar, China Post, GS1 databar

2D: Aztec, Data Matrix, QR/Micro QR code,

 $\label{eq:maxicode} \mbox{Maxicode, Chinese sensible (Han Xin) code, postal code, PDF417, DotCode,}$ 

Digital Watermarking: Digimarc

**OCR:** OCR A, OCR B, MICR E-13B and SEMI Font, in a 6 to 60 point OCR typeface

**Note:** Decode capabilities dependent on configuration.

## **REGULATORY**<sup>3</sup>:

**EMC:** EN55032, EN55035, EN61000-3-2, EN61000-3-3, FCC Part 15 Subpart B, ICES-003 Issue 7

Safety, Health and Environmental Compliance: EN62368-1, IEC 62368-1, IEC62471, IEC-63000(ROHS), UL 62368-1, CSA C22.2 NO. 62368-1, IEC60825 for XR model (laser)

**Accessories:** Stands, holders, holsters, power supplies, cables, heaters.

Warranty: Three-year factory warranty

Services: Honeywell Edge Service

**Utilities and Management:** EZConfig, SMU, Total Freedom, Scanner Edge, SDKs, Various Drivers

	STANDARD RANGE(SR) - TYPICAL		EXPANDED RANGE(XR) - TYPICAL	
SYMBOLOGY <sup>4</sup>	NEAR DISTANCE (MM [IN])	FAR DISTANCE (MM [IN])	NEAR DISTANCE (MM [IN])	FAR DISTANCE (MM [IN])
5 mil C39	10 [0.39]	269 [0.59]	10 [0.39]	269 [0.59]
10 mil C128	0 [0.0]	531 [20.91]	0 [0.0]	1,503 [59.17]
13 mil UPC	0 [0.0]	634 [24.96]	0 [0.0]	1,780 [70.08]
20 mil C128	0 [0.0]	1,033 [40.67]	0 [0.0]	2,812 [110.71]
100 mil C39	NA	NA	NA	10,848 [427.09]
6.7 mil PDF417	14 [0.55]	243 [9.57]	14 [0.55]	243 [9.57]
10 mil DataMatrix	5 [0.20]	261 [10.28]	5 [0.20]	261 [10.28]
20 mil QR Code	0 [0.0]	480 [18.9]	0 [0.0]	1,464 [57.64]
100 mil DataMatrix	NA	NA	NA	5,329 [209.80]

- Honeywell standard benchmarking testing conducted on Granit Ultra SR and XR models vs. Granit XP on 6 collections of reference barcodes
- For a complete listing of all supported barcode symbologies, please visit http://honeywell.com/PSS-symbologies.
- 3. For a complete listing of all compliance approvals and certifications, please visit <a href="https://www.honeywell.com/PSScompliance">www.honeywell.com/PSScompliance</a>.
- 4. Performance may be impacted by barcode quality and environmental conditions

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

# For more information

automation.honeywell.com

## **Honeywell Industrial Automation**

855 S Mint St Charlotte, NC 28202 800-582-4263 www.honeywell.com Honeywell standard benchmarking testing conducted on Granit Ultra SR and XR models vs. Granit XP on 6 collections of reference barcodes

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