

## N5600 Series

### MINIATURE AREA-IMAGING ENGINES



Bar code reading has never been so simple. N5600 series miniature area-imaging engines set new standards of performance and ease of integration and use for OEM customers and end users with Honeywell's advanced Adaptus® 6.0 imaging technology.

Built on an industry-leading imaging platform, Adaptus 6.0 delivers an entirely new level of bar code and OCR font reading performance, with unmatched speed and accuracy. At the heart of the system is a brand new proprietary imaging sensor—the world's first designed specifically for optimum bar code reading. With an advanced illuminating design, this unique sensor captures images for bar code decoding with exceptional tolerance for motion. The patented color option captures color images, without sacrificing bar code reading performance. Adaptus 6.0 also includes a completely revamped software architecture that leads the industry in its ability to decode hard-to-read bar codes.

Superior built-in versatility with various available options enables N5600 engines to meet the requirements of a wide range of applications. Backed by Honeywell's expert OEM integration support, and proven quality and reliability, N5600 engines deliver tremendous value to OEM customers by providing a best-in-class data capture solution, reducing development investment, and decreasing total ownership costs.

N5600 series engines are available as imagers with either a hardware decoder, for easy integration, or a licensed software decoder for space- and power-constrained applications such as mobile terminals.

## FEATURES

- **Adaptus 6.0 Imaging Technology**  
Provides fast and accurate reading of bar codes and OCR fonts with best-in-class range and extraordinary motion tolerance, even on hard-to-read codes and those displayed on mobile phone screens
- **Available Color Option**  
Patented technology allows color images of signatures, packages, vehicle license plates, identification cards and other objects to be captured, eliminating the need for a separate camera
- **High Visibility Laser Aiming Option**  
Ensures crisp and accurate targeting, even in bright sunlight
- **Supports TotalFreedom®**  
An open-system architecture for developing software plug-ins to implement value-added custom features such as Honeywell's EasyDL™
- **Remote MasterMind® Ready**  
Reduces total cost of ownership by providing a turnkey remote device management solution that easily manages and tracks usage of installed devices



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## TECHNICAL SPECIFICATIONS

<b>Performance</b>			
Sensor	Proprietary CMOS sensor with global shutter and 844 × 640 pixel resolution; 60 frames per second; optional color		
Illumination	617 nm visible red LED		
Aiming			
N5600 Imager	528 nm visible green LED		
N5603 Imager	650 nm high-visibility red laser; maximum output 1 mW Class 2 Laser		
Motion Tolerance	Up to 584 cm/s in total darkness with 100% UPC at 10 cm distance		
Field of View			
SR Optics	42.4° (Horizontal), 33.0° (Vertical)		
ER Optics	31.6° (Horizontal), 24.4° (Vertical)		
HD Optics	41.4° (Horizontal), 32.2° (Vertical)		
Scan Angles	Tilt: 360°, Pitch: ± 45°, Skew: ± 65°		
Symbol Contrast	20% minimum reflectance		
Symbologies			
Linear	UPC/EAN/JAN, GS1 DataBar, Code 39, Code 128, Code 32, Code 93, Codabar/NW7, Interleaved 2 of 5, Code 2 of 5, Matrix 2 of 5, MSI, Telepen, Trioptic, China Post		
Stacked	PDF417, MicroPDF417, GS1 Symbologies Composite		
2D Matrix	Aztec Code, Data Matrix, QR Code, Micro QR Code, MaxiCode, Han Xin Code		
Postal	Intelligent Mail Barcode, Postal-4i, Australian Post, British Post, Canadian Post, Japanese Post, Netherlands (KIX) Post, Postnet, Planet Code		
OCR Option	OCR-A, OCR-B, E13B (MICR)		
<b>Mechanical/Electrical</b>			
Dimensions (HxWxD)	Imager without mounting tabs (N5600, N5603): 12,5 mm x 20,8 mm x 17,2 mm Decoder board (N56XX DB) 19,1 mm x 39,8 mm x 8,2 mm Assembled imager and decoder board (N56X0, N56X3): 19,4 mm x 39,8 mm x 28,2 mm		
Weight	Imager: <7 g; Assembled imager and decoder board: <20 g		
Interface	Imager: 30-pin board-to-board (Molex 51338-0374) Decoder: 12-pin surface mount (Molex 52559-1252) or Micro-B USB		
Input Voltage	Imager: 3,3 VDC ± 5%; Decoder: TTL-RS232: 3,0 - 5,5 VDC; USB: 5,0 VDC ± 5%		
Typ. Current Draw @3,3 VDC	N5600: 276 mA (manual trigger); 142 mA (presentation); 90 µA (sleep) N5603: 228 mA (manual trigger); 142 mA (presentation); 90 µA (sleep)		
<b>Environmental/Other</b>			
Temperature	Operating: -25°C to 50°C; Storage: -25°C to 70°C		
Humidity	0 to 95% relative humidity, non-condensing, at 50°C		
Ambient Light	0-100 000 lux (total darkness-bright sunlight)		
Shock Rating	3500 G for 0,4 ms at 23°C to mounting surface		
Vibration	3 axes, 1 hour per axis; 2,54 cm peak-to-peak displacement (5 Hz to 13 Hz), 10 G acceleration (13 Hz to 500 Hz), 1 G acceleration (500 Hz to 2000 Hz)		
MTBF	N5600 > 2000 000 hours; N5603 > 375 000 hours		
Warranty	15 month limited warranty		
<b>Working Range</b>			
	High Density (HD) Optics	Standard Range (SR) Optics	Extended Range (ER) Optics
	3 mil Code 39 48 - 91 mm	100% UPC 46 - 419 mm	100% UPC 61 - 533 mm
	5 mil Code 39 30 - 127 mm	5 mil Code 39 64 - 163 mm	10 mil Code 39 61 - 422 mm
	7,5 mil Code 39 33 - 152 mm	10 mil Code 39 28 - 338 mm	15 mil Code 128 38 - 549 mm
	5 mil MicroPDF 30 - 132 mm	6,7 mil PDF417 46 - 185 mm	10 mil PDF417 56 - 396 mm
	5 mil DataMatrix41 - 86 mm	10 mil Data Matrix 53 - 203 mm	MaxiCode 79 - 528 mm
Resolution linear bar codes	3 mil	5 mil	5 mil
resolution 2D matrix codes	5 mil	6,7 mil	7,5 mil

### N56x3 only



### BARCODAT

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