

HALOGEN™ DE2171-AF



RELIABLE SCANNING FROM NEAR AND FAR

The Halogen™ DE2171-AF is a decoded scan engine capable of reading 1D and 2D barcodes between 15 cm / 6 in and 20 m / 65 ft. With a highly visible aiming beam and powerful illumination, scanning all types of labels from a wide range of distances has never been easier. Simple point and shoot operation allow the user to concentrate on the work at hand.

ACTIVE FOCUS AND POWERFUL DECODING

The DE2171-AF scan engine includes an active focus system capable of optimizing performance for any distance. Combined with built-in world-class decoding capability, the DE2171-AF scan engine delivers performance in applications where other devices cannot compete.

EASY INTEGRATION

Support for both USB and RS-232 host interface in a single model is perfect for integrators who must support multiple platforms and applications.

FEATURES

- Omnidirectional reading on 1D/2D codes with extra-long-range scanning capabilities
- Active autofocus system provide quick reading from 15 cm / 6 in to 20 m / 65 ft
- Bright aiming beam is visible in bright light conditions
- Illumination region indicates reading region and provides best-in-class performance in low light conditions
- Single model supports USB and UART host interfaces

INDUSTRY - APPLICATION

- Retail: Warehouse Applications (AGVs, Robotics)
- Transportation & Logistics: Vehicle Access Control, AGVs, Robots
- Manufacturing: Warehouse Applications (AGVs, Robotics)
- OEM: Barcode Scanners, Mobile Terminals

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TECHNICAL SPECIFICATIONS

DECODING CAPABILITY

1D / Linear Codes	Auto discriminates all standard 1D codes including GS1 DataBar™ linear codes.
2D Codes	Aztec Code; China Han Xin Code; Data Matrix; MaxiCode; Micro QR Code; QR Code
Postal Codes	Australian Post; British Post; China Post; IMB; Japanese Post; KIX Post; Korea Post; Planet Code; Postnet; Royal Mail Code (RM4SCC)
Stacked Codes	EAN/JAN Composites; GS1 DataBar Composites; GS1 DataBar Expanded Stacked; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional; MacroPDF; MicroPDF417; PDF417; UPC A/E Composites

ELECTRICAL CHARACTERISTICS

Current	Typical Values at 23°C - default configuration: Standard Operation (RMS): 320 mA at VCC = 5V TBC 500 mA at VCC = 3.3V TBC Standard Operation (peak): 500 mA at VCC = 5V for t < 1ms 700 mA at VCC = 3.3V for t < 1ms Idle (RMS): 90 mA at VCC = 5V 100 mA at VCC = 3.3V Low Power: 1.5 mA
Input Voltage	Values at 23°C: VCC: 3.0V to 5.5V VCC_I/O: 1.7V to 3.6V VCC_ANALOG: 3.0V to 5.5V

PERFORMANCE CHARACTERISTICS

Image Sensor	MP: 1280 x 800 pixels
Light Source	Illumination: 2 LEDs Aiming: 650nm VLD
Field of View	14°H x 10.5°V
Print Contrast Minimum	20% minimum contrast

PHYSICAL CHARACTERISTICS

Dimensions	Nominal Size: Width 1.50" / 38.00 mm Height 0.79" / 20.00 mm Depth 1.44" / 36.50 mm Maximum Size: Width 1.52" / 38.50 mm Height 0.79" / 20.00 mm Depth 1.44" / 36.50 mm
Weight	61 g / 2.15 ounces

INTERFACES

Interfaces	UART/USB or SPI on a 27 pin ZIF Connector
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SCANNING ANGLES

Reading Angle	Pitch: +/- 60°; Roll (Tilt): up to +/- 180°; Skew (Yaw): +/- 60°
Minimum Element Width	1D Linear: 2.5 mils PDF: 3 mils Datamatrix: 5 mils

READING RANGES

Typical Depth of Field	Minimum distance determined by symbol length and scan angle. Printing resolution, contrast, and ambient light dependent. 100% UPC/EAN: 20 to 300 cm / 7.8 to 118.1 in Code 39: 3 mils: 15 to 95 cm / 5.9 to 37.4 in 20 mils: up to 500 cm / up to 196.9 in Code 128: 40 mils: up to 850 cm / up to 335.0 in 100 mils: up to 20 m / up to 65.0 ft DataMatrix: 10 mils: 15 to 100 cm / 5.9 to 39.4 in 55 mils: up to 550 cm / up to 216.5 in 100 mils: up to 10 m / up to 32.8 ft 200 mils: up to 20 m / up to 65 ft
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- Reading performances @ 300 lux of ambient light.
- If not declared, near field is limited by Field of View.

USER ENVIRONMENTAL

Temperature	Operating: -20 to 55 °C / -4 to 131 °F Storage / Transport: -40 to 70 °C / -40 to 158 °F
Humidity (Non-condensing)	95%
Mechanical Shock	2500 G +/- 5% applied via any mounting surface at 23 °C for a period of 0.85 +/- 0.05 msec
Ambient Light Immunity	Up to 100,000 Lux
ESD Level	EN 61000-4-2 +/-2.0KV Air Discharge @ connector +/-1.0KV Contact Discharge @ chassis

SAFETY & REGULATORY

Environmental Compliance	RoHS compliant
Aiming System (Laser)	EN/IEC 60825-1:2007 and 2014 (class 2) 21 CFR 1040 (CDRH) (class II)
Illumination System (2 LEDs)	EN/IEC 62471 Exempt Risk Group

Dimensions of Scan Engine (Measurements in Millimeters)

