



21.17 mm W x 14.6 mm D x 11.52 mm H

## Features & Benefits:

- Imager and Decoder board in one compact package simplifies integration
- RS-232 or USB host interfaces
- Imaging capability reads 1D/2D barcodes and adds image functionality
- Size, mounting holes, and connector pin-out compatible with popular laser scan engines, making it easy to upgrade design

## Compact OEM 2D Decoding Image Engine

JE-238 is a miniature, self-contained 2D barcode scan engine that meets the needs of a wide array of customers and markets. JE-238 provides professional level scanning and decoding capability in one of the industry's most compact packages. JE-238 represents a balance between size, performance, and ease of integration with a single piece imager and decoding platform.

JE-238 is available in both USB and TTL signal level RS-232 versions and provides decoding for all industry standard barcodes.

JE-238 benefits from JADAK's suite of barcode decoding and machine vision software tools that can be adapted to deliver highly accurate results for the toughest applications. This product performance, coupled with JADAK's unparalleled technical support, project management, and customer-focused engineering, provides OEM customers with the industry's best performance while allowing OEM's to focus on product design. JADAK provides OEMs with confidence in data collection results.

## Applications:

- Mobile Terminals, Cell Phone Screens, and Labels
- Capture of Color Images, such as Signatures, Packages, Identification Cards, and Other Objects



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Performance	
Sensor:	CMOS sensor with 640 x 480 pixel resolution
Illumination & Aiming:	White LED illumination; Red LED dot aimer
Typical frame rate:	30 frames per second
Motion Tolerance:	Up to 10 cm/s (4 in/s) for 13 mil UPC at optimal focus
Field of View:	Horizontal: 37.8° Vertical: 28.8°
Scan Angles:	Tilt: 360°, Pitch: ± 45°, Skew: ± 45°
Symbol Contrast:	35% minimum print contrast ratio
Symbologies:	
Linear:	Codabar, Code 11, Code 128, Code 2 of 5, Code 39, Code 93 and 93i, EAN/JAN-13, EAN/JAN 8, IATA Code 2 of 5, Interleaved 2 of 5, Matrix 2 of 5, MSI, GS1 Databar, UPC-A, UPC E, UPC-A/EAN-13 with Extended coupon Code, Coupon GS1 Code 32(PARAF), EAN-UCC Emulation
2D Stacked:	Codablock A, Codablock F, PDF417, MicroPDF417
2D Matrix:	Aztec Code, Data Matrix, MaxiCode, QR Code, Chinese Sensible (Han Xin) code
Postal Codes:	Australian Post, British Post, Canadian Post, China Post, Japanese Post, Korea Post, Netherlands Post, Planet Code, Postnet
Mechanical / Electrical	
Dimensions:	Typical (WxDxH): 21.17 x 14.6 x 11.52 mm; Maximum (WxDxH): 21.57 x 14.95 x 11.73 mm
Weight:	3.6 g
Interface:	12-pin ZIF connector, with both TTL serial and USB configurations
Input Voltage:	TTL Serial: 3.3 VDC ± 5% USB: 5.0 VDC ± 5%
Typical Current Draw:	TTL Serial: 3.3 V input – 310 mA RMS while scanning, 65 mA RMS at idle, 3.5mA while on standby USB: 5 V input – 220 mA RMS while scanning, 60 mA RMS at idle, 2.5 mA while on standby
Environmental / Other	
Temperature: Operating:	-10°C to 40°C
Storage:	-40°C to 60°C
Humidity:	to 95% relative humidity, non-condensing, at 40°C
Ambient Light:	0–100,000 lux (total darkness to bright sunlight)
Shock Rating:	2500 G for 0.4 ms at 23°C
Vibration:	3 axes, 1 hour per axis: 2.54 cm (1") peak-to-peak displacement (5 Hz to 13 Hz), 10 G acceleration (13 Hz to 500 Hz), 1 G acceleration (500 Hz to 2,000 Hz)
MTBF:	70,000 hrs.
Standard Range (SR) OPTICS	
Symbology / X-DIM	Typical Range*
100% U.P.C.	55 to 280 mm (2.1 in to 11.0 in)
5 mil Code 39	61 to 130 mm (2.4 in to 5.1 in)
20 mil Code 39	60 to 380 mm (2.4 in to 15.0 in)
6.7 mil PDF4117	60 to 125 mm (2.4 in to 4.9 in)
10 mil Data Matrix	60 to 130 mm (2.4 in to 5.1 in)
20 mil QR	50 to 230 mm (2.0 in to 9.0 in)
* Typical Performance may be impacted by bar code quality and environmental conditions.	

## ABOUT JADAK:

JADAK, a business unit of Novanta, is a market leader in machine vision, RFID, barcode, printing, and color and light measurement products and services for original equipment manufacturers. The company designs and manufactures embedded detection and analysis solutions that help customers solve unique inspection, tracking, scanning and documenting. The company is ISO 9001 and ISO 13485 registered.

Novanta is a trusted technology partner to OEMs in the medical and advanced industrial technology markets, with deep proprietary expertise in photonics, vision and precision motion technologies.

[www.jadaktech.com](http://www.jadaktech.com)

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**JADAK**  
A Novanta Company

### USA Office

phone: +1 315.701.0678  
email: [info@jadaktech.com](mailto:info@jadaktech.com)  
web: [jadaktech.com](http://jadaktech.com)

### European Office

phone: +31 (0)76.522.5588

### Asia Pacific Office

phone: +86 512.6283.7080

