



23.5 mm L x 16.2.8 mm W x 6.8 mm H

## Features & Benefits:

- Slim, Compact Design for Easy Integration and Shorter Design Cycles
- Optimized White Illumination Reads All Barcodes
- Aimer Gives Clear, Sharp and Easily Observed Target Area
- Fast Scan Speed and Motion Tolerance Up to 5 Meters/Second for Excellent Reading Capability
- Support for Color Barcodes and Full Symbolology
- Fast & Accurate Reading



Decoding Board (DB-206) is miniature decoder board that can be used with JE-233V.

## Miniature, .5 Megapixel Smart Vision Camera

JADAK's JE-233V high performance, embedded smart vision camera is slim and compact. JE-233V integrates JADAK's high performance 1D/2D decoding technology for superior barcode reading, outstanding speed, and unrivaled accuracy, with an outstanding machine vision experience with detailed image capture that is motion tolerant. The proprietary image sensor provides powerful white illumination for a better user experience and more integration convenience. The ultra-compact JE-233V engine makes it easy to decode hard-to-read barcodes under challenging ambient light environments.

Interface flexibility was designed into the JE-233V. It supports both traditional parallel and MIPI interfaces for emerging technologies. This enables easier integration with the latest processors, saves space, reduces overall design cost and shortens the integration and development cycle. The JE-233V series is also backwards-compatible, reducing development complexity and making it easier and faster to integrate.

The JE-233V is available with a high-visibility LED based aimer that provides an ultra-clear and sharp green line, making targeting and scanning easy. The JE-233V series is a smart choice for those who do not want to compromise thermal management, power consumption, peak current control and EMI for unmatched 2D scanning performance.

## Applications:

- Enterprise mobility, including mobile phone screens
- Tablets and sleds
- Wearable devices



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# JE-233V

Performance:	
<b>Sensor</b>	Proprietary CMOS sensor with global shutter and 844 x 640 pixel resolution; 60 frames per second; optional color
<b>Illumination</b>	White LED (exempt risk group)
<b>Aiming</b>	LED Aimer: 528 nm visible green
<b>Motion Tolerance</b>	Up to 584 cm (230") per second in total darkness with 100% UPC at 10 cm (4") distance
<b>Field of View</b>	42.4° (Horizontal), 33.0° (Vertical)
<b>Scan Angles</b>	Tilt: 360°, Pitch: ± 45°, Skew: ± 60°
<b>Symbol Contrast</b>	20% minimum reflectance
<b>Symbologies</b>	<b>Linear:</b> 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 <b>2D Stacked:</b> PDF417, MicroPDF417, GS1 Composite <b>2D Matrix:</b> Aztec Code, Data Matrix, QR Code, Micro QR Code, MaxiCode, Han Xin Code <b>Postal:</b> Intelligent Mail Barcode, Postal-4i, Australian Post, British Post, Canadian Post, Japanese Post, Netherlands (KIX) Post, Postnet, Planet Code <b>OCR Option:</b> OCR-A, OCR-B, E13B (MICR)
Mechanical/Electrical:	
<b>Dimensions (LxWxH)</b>	23.5 mm x 16.2 mm x 6.8 mm
<b>Weight</b>	37g
<b>Interface</b>	Imager: Parallel camera data, CSI-2 MIPI
<b>Input Voltage</b>	Imager: 3.3VDC ± 5%
<b>Typical Current Draw @3.3VDC</b>	JE-233-02: 175 mA (manual trigger); 90 µA (sleep) JE-233-03: 195 mA (manual trigger); 90 µA (sleep)
Environmental/Other	
<b>Temperature</b>	Operating: -25°C to 50°C (-13°F to 122°F); Storage: -40°C to 85°C (-40°F to 185°F)
<b>Humidity</b>	0 to 95% relative humidity, non-condensing, at 50°C (122°F)
<b>Ambient Light</b>	0–100,000 lux (total darkness–bright sunlight)
<b>Shock Rating</b>	3,500 G for 0.4 ms at 23°C (73°F)
<b>Vibration</b>	Displacement of 5.1 mm(0.2") peak-to-peak from 5 Hz to 22 Hz, with acceleration of 5 g's peak from 22 Hz to 300 Hz
<b>MTTF</b>	375,000 hours
<b>Standard Range (SR) Optics</b>	100% U.P.C.: 46 mm – 419 mm (1.8" – 16.5") 5 mil Code 39: 64 mm – 163 mm (2.5" – 6.4") 10 mil Code 39: 28 mm – 338 mm (1.1" – 13.3") 6.7 mil PDF417: 46 mm – 185 mm (1.8" – 7.3") 10 mil Data Matrix: 53 mm – 203 mm (2.1" – 8.0")
<b>Resolution</b>	Linear Barcodes: 0.127 mm (5.0 mil) 2D Matrix Codes: 0.169 mm (6.7 mil)

## 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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