

DSE0450 Overview

Product Overview

DSE0450 Ultra Compact 2D Embedded Barcode Scan module

The DSE0450 is a decoded ultra-compact high performance 2D scan module with RS232 or UART interface.

The reader features an exceptional high-speed sensor which enables image capture at a full 60 frames per second, delivering outstanding motion tolerance. The integrated white illumination is pleasant to the user's eyes and provides greater reading capabilities inside or outside of an OEM machine. The scan engine features an outstanding depth-of-field, a large field-of-view, high motion tolerance, snappy reading, and excellent performance on decoding poorly printed bar codes and bar codes displayed on mobile devices and computer screens. The DSE0450 incorporates a cross hair aimer and visual good read green spot greatly enhancing the user experience and ease of use. The DSE0450 also includes an integrated beeper for customer feedback.

Features

- Highly reliable Decoding engine
- Ultra Compact size and multiple configuration options
- Highly visible center cross hair and 4 dot aiming system
- Steady integrated white illumination
- Snappy reading performance with high motion tolerance
- Excellent reading of 1D or 2D codes on print or displayed on mobile device or computer screens
- Green Spot good-read feedback
- Standard RJ50 RS232 or UART communications
- Optional Integrated close range trigger sensor
- Optional Bluetooth or WiFi interface







DSE0450-DTC0E

Applications



The DSE0450 is perfectly suited for OEM applications and specifically designed for embedded barcode requirements in:

- Medical devices
 - evices

 Bedside point of care devices
- Lab Automation systems
 - Lottery Machines

Kiosks

- Self Service Systems
- Vending machines
- Loyalty reward programs



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) EAN/JAN Composites; GS1 DataBar Composites;

STACKED CODES GS1 DataBar Expanded Stacked; GS1 DataBar

Stacked: GS1 DataBar Stacked Omnidirectional: MacroPDF; MicroPDF417; PDF417; UPC A/E

Composites

ELECTRICAL

CURRENT Operating (Typical): <150mA Standby/Idle

(Typical): 12mA

INPUT VOLTAGE 4.5 - 5.5 VDC +/-5% at 23 °C

ENVIRONMENTAL

AMBIENT LIGHT 0 - 100,000 lux

HUMIDITY 5 - 95% (NON -CONDENSING) SHOCK 2500 G at 23 °C at 0.85 m sec.

TEMPERATURE Operating: -10 to 50 °C / 14 to 122 °F Storage/Transport: -40 to 70 $^{\circ}$ C / -40 to 158 $^{\circ}$ F

INTERFACES

INTERFACES DSE0450: UART 8-pin zif cable

DSE0450-DTXXX: RS-232/RJ connector

PHYSICAL CHARACTERISTICS

DIMENSIONS 13.65 H x 40.1 W x 47.86 D mm /0.54 H x 1.58

W x 1.88 D in (Measured as one scan module)

WEIGHT 20.0 g / 0.7 oz

READING PERFORMANCE

IMAGER SENSOR WVGA: 752 x 480 pixels

LIGHT SOURCE Aiming: 650 nm VLD Illumination: Internal

White LEDs

PRINT CONTRAST RATIO (MIN) 25%

FIELD OF VIEW 40° H x 26° V

READING ANGLE Pitch: +/- 60°; Roll (Tilt): +/-180°; Skew (Yaw):

+/- 60°

READING INDICATORS Green Spot good read confirmation (optional),

Audible Beeper

RESOLUTION (MAXIMUM) 1D Linear: 3 mils; DataMatrix: 7.5 mils;

PDF417: 5 mils

READING RANGES

TYPICAL DEPTH OF FIELD Minimum distance determined by symbol length

and scan angle. Printing resolution, contrast, and ambient light dependent. 1D / 2D CODES 3 mils Code 39: up to 10.5 cm / up to 4.1 in 5 mils Code 39: 6.5 to 21.0 cm / 2.6 to 8.3 in 13 mils EAN-13: 5.5 to 39.0 cm / 2.2 to 15.4 in 20 mils Code 39: up to 50.0 cm / up to 19.7 in 15 mils DataMatrix: 4.0 to 25.0 cm / 1.6 to 9.8 in

Complies to China RoHS; Complies to EU RoHS

Command set for programmatic configuration

SAFETY & REGULATORY

ENVIRONMENTAL COMPLIANCE

LASER CLASSIFICATION

Caution Laser Radiation - Do not stare

into beam IEC 60825 Class 2

UTILITIES

DATALOGIC ALADDIN™

Datalogic Aladdin configuration SW

JavaPOS Utilities are available OPOS / JAVAPOS

OPOS Utilities are available

REMOTE HOST DOWNLOAD Lowers service costs and improves operations

WARRANTY

WARRANTY 18-Month Factory Warranty



