

# DSM04XX FIXED SCAN MODULE



## BIG PERFORMANCE IN A SMALL PACKAGE

The DSM04XX Fixed Scan Module is the solution you need for high performance fixed position scanning in a compact form factor. Available in WVGA and Megapixel models with different Field of View and Depth of Field. The Wide-Angle model is particularly useful for embedded applications where space is at a premium.

## RUGGED CONSTRUCTION

The enclosure is constructed with high impact resin that is resistant to cleanings solvents and disinfectant solutions. IP54 particulate and water sealing allows rugged and dependable scanning performance.

## SIMPLE INTEGRATION

The DSM04XX Fixed Scan Module provides simple electrical and mechanical integration for system designers. Included mounting hardware allows mounting from all sides of the device at any angle. Interface options include USB, RS-232 or multi-interface models allowing 'plug-and-play' installation perfect for integrators who must support multiple platforms and applications.



## FEATURES

- Wide range of models incorporating engines from the Halogen DE2X1X Family
- Highly visible 4-Dot aimer with center cross for targeted scanning
- Excellent Motion Tolerance
- Image capture and document scanning capabilities
- Maximum resolution down to 2 mils
- Interface options of USB, RS-232, or both
- Datalogic's patented 'Green Spot' technology for good-read feedback
- Integrated good-read beeper
- Multiple scan modes including Autosense and software triggering
- High-impact and solvent-tolerant enclosure
- Water and Particulate Sealing Rating of IP54

## INDUSTRY - APPLICATION

- Retail:
  - Self-Checkout
  - Price Verifiers
  - Ticket readers
  - Robotics
  - AGVs
- T&L:
  - Ticket & Passport Reading
  - Access Control
  - Robotics
  - AGVs
- Manufacturing:
  - Work in Process
  - Access Control
  - Robotics
  - AGVs
- Healthcare:
  - Access Control
  - Service Kiosks
  - Lab Test Equipment
  - Document Handling



## DSM04XXX FIXED SCAN MODULE

# TECHNICAL SPECIFICATIONS

PART NUMBERS	
<b>DSM0421</b>	DSM0400, 2D, WVGA, USB, 50 cm Cable
<b>DSM0422-DL</b>	DSM0400, 2D, MP-DL, USB, 50 cm Cable
<b>DSM0452-DL</b>	DSM0400, 2D, MP-DL, RS-232, 2 m Cable
<b>DSM0492-DL</b>	DSM0400, 2D, MP-DL, RS-232 and USB, RJ-45 Connector
<b>DSM0422-WA</b>	DSM0400, 2D, MP-WA, USB, 50 cm Cable
<b>DSM0452-WA</b>	DSM0400, 2D, MP-WA, RS-232, 2 m Cable
<b>DSM0492-WA</b>	DSM0400, 2D, MP-WA, RS-232, USB, RJ-45 Connector

DECODING CAPABILITY	
<b>1D / Linear Codes</b>	All standard 1D codes including: UPC/EAN/JAN, P2 / P5 add-ons; Code 39; Italian Pharmacode 39; Code 128; C128 ISBT; I 2 of 5; Standard 2 of 5; Interleaved 2 of 5; Industrial 2 of 5; Datalogic 2of5; IATA; Code 11; Codabar; ABC Codabar; EAN 128; Code 93; MSI/Plessey; RSS-14; BC412; Databar Limited; Databar Omnidirectional; Databar Expanded; IATA; Trioptic; Matrix 2/5; Telepen. Composite codes CC-A, CC-B and CC-C
<b>2D Codes</b>	Aztec Code; China Han Xin Code; Data Matrix; MaxiCode; Micro QR Code; QR Code
<b>Postal Codes</b>	Australian Post; British Post; China Post; IMB; Japanese Post; KIX Post; Korea Post; Planet Code; Postnet; Royal Mail Code (RM4SCC)
<b>Stacked Codes</b>	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	
<b>Input Voltage</b>	5 VDC $\pm$ 5%
<b>Current: DSM0421 USB Connected</b>	Operating (Typical): $\approx$ 214 mA** Standby/Idle (Typical): $\approx$ 57 mA* Low Power: $\approx$ 3.9 mA
<b>Current: DSM0422 / DSM0492 USB Connected</b>	Operating (Typical): $\approx$ 214 mA** Standby/Idle (Typical): $\approx$ 55 mA* Low Power: $\approx$ 5 mA
<b>Current: DSM0452 / DSM0492 RS-232 Connected</b>	Operating (Typical): $\approx$ 246 mA** Standby/Idle (Typical): $\approx$ 50 mA* Low Power: $\approx$ 9 mA

\*\*If "power" and "trigger" status LED are enabled add 30 mA

\* If "power" status LED is enabled add 15 mA

ENVIRONMENTAL	
<b>Ambient Light</b>	0 - 100,000 lux
<b>Humidity (Non-condensing)</b>	5 - 95%
<b>Drop Resistance</b>	Withstands repeated drops from 3 ft onto a concrete surface.
<b>Particulate and Water Sealing</b>	IP54
<b>Temperature</b>	Operating: -20 to 50 °C / -4 to 122 °F Storage/Transport: -40 to 70 °C / -40 to 158 °F

INTERFACES	
<b>Interfaces</b>	USB: HID-KBD, COM, OEM& Composite (KBD & COM) RS-232

PHYSICAL CHARACTERISTICS	
<b>Colors Available</b>	Black
<b>Dimensions</b>	4.7 x 2.7 x 3.8 cm / 1.85 x 1.06 x 1.50 in
<b>Weight (with cable)</b>	USB version - Approximately 131 g / 4.62 oz RS-232 version - Approximately 155 g / 5.47 oz RJ-45 version - Approximately 96 g / 3.39 oz

READING PERFORMANCE	
<b>Imager Sensor</b>	WVGA: 752 x 480 pixels MP: 1280 x 960 pixels
<b>Light Source</b>	Aiming: 650 nm VLD Illumination: White LEDs
<b>Field of View</b>	DSM0421: 40°H x 26°V DSM04X2-DL: 42°H x 32°V DSM04X2-WA: 52°H x 40°V
<b>Reading Angle</b>	Pitch: +/- 60°; Roll (Tilt): +/-180°; Skew (Yaw): +/- 60°
<b>Reading Indicators</b>	Beeper (Adjustable volume); Good Read Feedback: Datalogic 'Green Spot' Technology; Good read top LED.
<b>Resolution (Maximum)</b>	1D Linear: 2.5 mils (DSM04X2) - 3.0 mil (DSM0421) Data Matrix: 6 mils (DSM04X2) - 7.5 mils (DSM0421) PDF417: 3 mils (DSM04X2) - 6.6 mils (DSM0421)
<b>Print Contrast (Minimum)</b>	25%
<b>Image Capture</b>	Greyscale: 256; Graphic Formats: BMP, JPEG

READING RANGES	
<b>Typical Depth of Field</b>	Minimum distance determined by symbol length and scan angle. Printing resolution, contrast, and ambient light dependent.
<b>1D/2D Codes: DSM0421</b>	3 mils Code 39: 8.0 to 17.5 cm / 3.1 to 6.9 in 5 mils Code 39: 5.5 to 26.0 cm / 2.1 to 10.2 in 13 mils EAN-13: 4.5 to 42.0 cm / 1.8 to 16.5 in 20 mils Code 39: up to 59.0 cm / up to 23.2 in 15 mils Data Matrix: 3.5 to 26.5 cm / 1.4 to 10.4 in 10 mils PDF417: up to 20.0 cm / up to 7.9 in
<b>1D/2D Codes: DSM04X2-DL</b>	3 mils Code 39: 6.5 to 20.0 cm / 2.5 to 7.8 in 5 mils Code 39: 3.5 to 29.0 cm / 1.3 to 11.4 in 10 mils Data Matrix: 7.5 to 26.0 cm / 2.9 to 10.2 in 13 mils EAN-13: 4.5 to 42.0 cm / 1.7 to 16.5 in 15 mils Data Matrix: 5.5 to 32.0 cm / 2.1 to 12.5 in 20 mils Code 39: up to 60.0 cm / up to 23.6 in
<b>1D/2D Codes: DSM04X2-WA</b>	3 mils Code 39: 5.0 to 18.0 cm / 2.0 to 7.1 in 5 mils Code 39: 3.0 to 24.0 cm / 1.2 to 9.4 in 10 mils Data Matrix: 4.0 to 20.0 cm / 1.6 to 7.9 in 13 mils EAN-13: 3.5 to 37.0 cm / 1.4 to 14.6 in 15 mils Data Matrix: 3.0 to 25.0 cm / 1.2 to 9.8 in 20 mils Code 39: up to 60.0 cm / up to 23.6 in

SAFETY & REGULATORY	
<b>Agency Approvals</b>	The product meets necessary safety and regulatory approvals for its intended use. The Quick Reference Guide for this product can be referred to for a complete list of certifications.
<b>Environmental Compliance</b>	Complies to China RoHS; Complies to EU RoHS
<b>Laser Classification</b>	Caution Laser Radiation - Do not stare into beam IEC 60825 Class 2

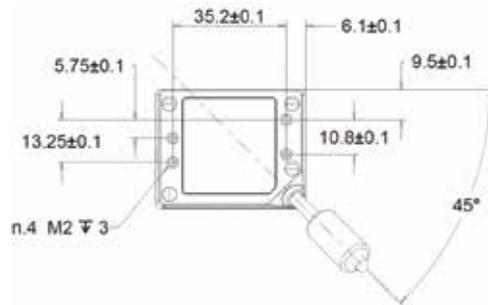
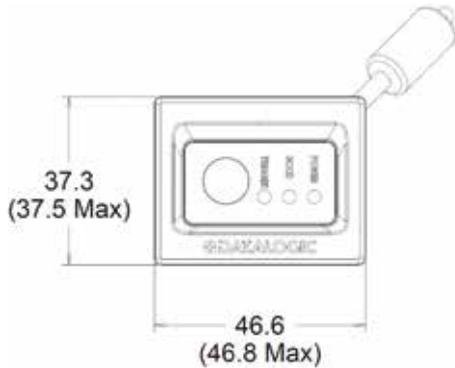
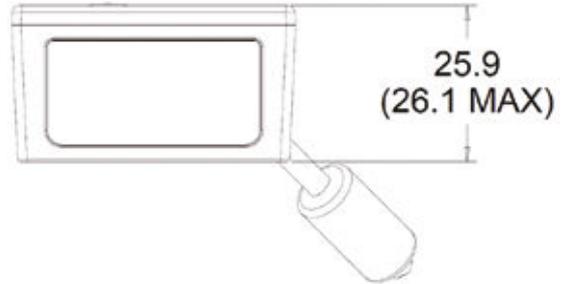
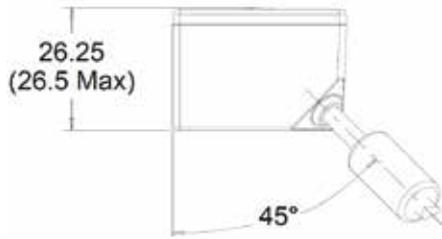
SOFTWARE INTEGRATION	
<b>Operating System Support</b>	Windows; Linux, Android™
<b>Tools</b>	DESP Demonstration & Configuration Utility; Datalogic Aladdin™

WARRANTY	
<b>Warranty</b>	3-Year Factory Warranty

# DSM04XXX FIXED SCAN MODULE

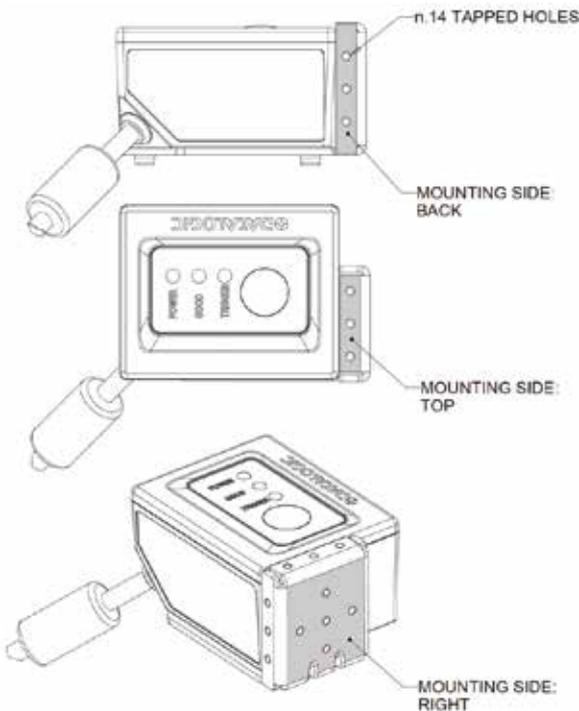
## TECHNICAL SPECIFICATIONS

DIMENSIONS OF THE FIXED SCAN MODULE (MEASUREMENTS IN MILLIMETERS)



## 5-SIDE MOUNTING BRACKET (INCLUDED)

Mounting Option 1  
Enables Right, Back and Top Mounting



Mounting Option 2  
Enables Left, Front and Top Mounting

