

# IMAGETEAM<sup>™</sup> 4410 HD/HD10 Hand Held 2D Image Readers



The Hand Held Products IMAGETEAM<sup>™</sup> (IT) 4410 High Density Image Reader is a hand held input device for reading and decoding two dimensional (2D) symbologies. Offering integrated support for Matrix, stacked linear, and conventional linear bar codes, as well as a single line of OCR-A and OCR-B fonts. Multi-line OCR applications can also be read. The IT4410 is designed for reading high density matrix symbols. The IT4410 has the power to capture and download images to a PC for applications, such as signature capture, PC-based decoding, and image lift requirements.

Lightweight, balanced, and easy to use, the IT4410 can be used in repetitive, high volume hand scanning operations in even the most demanding environments. The IT4410 can be configured for keyboard wedge, Non Decoded Laser Output (Code 128 emulation), TTL, or True RS-232. The IT4410 connects to all popular PCs and portable data terminals. The Non Decoded Laser Output mode can be used with external wedge decoders and portable terminals or other devices without 2D decoding capability. The IT4410 can be integrated with all types of customer systems.

The IT4410 features integrated processing for a one-piece scanning solution - no additional boxes or electronics needed. The reader provides omni-directional and auto-discrimination decoding for symbologies such as Maxicode, PDF 417, QR, Data Matrix, Aztec code, RSS code, composite codes, postal codes, Code 39, Code 93, Interleaved 2 of 5, Codabar, Code 128, UPC, and EAN. Additional symbologies will be added based on market demand.

Because the IT4410 is a fixed focus device, three product models with different focal points are available. Two high density scanners are available: IT4410HD and IT4410HD10. The IT4410HD, with a focal point of 2 inches, is recommended when the matrix symbols are less than 10 mil. The IT4410HD10 is recommended for applications when the matrix codes are greater than 10 mil. This version, with a focal point of 3 inches, maximizes the depth of field on 10 mil matrix codes, which directly correlates to greater functionality by the end user. The long range (LR) model of the IT4410 is highlighted in a separate data sheet.

## Features & Benefits

### **Supports All Popular 2D Symbologies**

*IT4410 supports all popular matrix and stacked linear symbologies: Maxicode, DataMatrix, QR, and PDF 417. Additional symbologies will be added as emerging codes are approved by AIM.*

### **Hand Held Products Video Imaging Technology**

*Hand Held Products' over 20 years experience in developing video-based instruments for medical and industrial inspection is brought to 2D data collection systems.*

### **Hand Held Reader**

*Opens up new 2D bar code and image capture possibilities in portable hand held and fixed scanning applications.*

### **Omni-Directional Scanning**

*The video technology basis for the IT4410 means it can offer omni-directional scanning, even on linear codes, greatly simplifying operator training and increasing productivity.*

### **Aiming**

*Using the state-of-the-art binary optics, the IT4410 provides a view finder pattern as an ease-of-use feature for the user. This technique will improve the overall system throughput and provides necessary framing for image capture.*

### **Autodiscriminates Between Supported Symbologies and Fonts**

*Reads all major linear, stacked linear, and matrix bar codes as well as machine readable fonts used in Optical Character Recognition (OCR).*

**Performance**

**HD Focal Point:** 2 inches from nose  
**HD10 Focal Point:** 3 inches from nose

<b>HD Working Range:</b> (typical)	<b>6 pt OCR</b> <b>20 cpi</b>	<b>6.6 mil QR</b> <b>(.017 cm)</b>	<b>6.6 mil Data Matrix</b> <b>(.017 cm)</b>	<b>4 mil Linear</b> <b>(.01 cm)</b>
<b>Near</b>	2 in. (5.1 cm)	1.7 in. (4.3 cm)	1.7 in. (4.3 cm)	1.6 in. (4.6 cm)
<b>Far</b>	3.5 in. (8.9 cm)	2.45 in. (6.2 cm)	2.45 in. (6.2 cm)	2.7 in. (6.9 cm)

<b>HD10 Working Range:</b> (typical)	<b>10 mil QR</b> <b>(.025 cm)</b>	<b>10 mil Data Matrix</b> <b>(.025 cm)</b>	<b>5 mil Linear</b> <b>(.013 cm)</b>
<b>Near</b>	2.0 in. (5.1 cm)	2.2 in. (5.6 cm)	2.75 in. (7.0 cm)
<b>Far</b>	4.0 in. (10.2 cm)	3.8 in. (9.6 cm)	3.75 in. (9.5 cm)

**Rotational Sensitivity:** 360°  
**Viewing Angle:** ±45°  
**Ambient Light:** Total darkness to 100,000 lux (full sunlight)  
**Aiming:** 660nm LEDs provide bright aiming line

**Symbologies**

**2 Dimensional:** Maxicode, PDF417, Micro PDF, Aztec, Aztec Mesa, Data Matrix, QR Code, Code 49, UCC Composite, Snowflake\*, Vericode\*, Dataglyphs\*

**Linear:** Code 39, Code 128, Codabar, UPC, EAN, I 2 of 5, RSS, BC 412\*, Code 93, Codablock  
 \* available to licensed users only

**Postal:** Postnet (US), BPO4 State, Canadian 4 State, Japanese Post, KIX (Dutch Post), Planet Code

**OCR Fonts:** OCR-A, OCR-B

**Interfaces:** RS232, Wedge, and HHLC (Code 128 Emulation)

**Programmable**

**Options:** Baud, Parity, Data Formatting, Code Options

**Mechanical/Electrical****Dimensions**

**Length:** 6.1 in. (15.4 cm)  
**Height:** 5.6 in. (14.2 cm)  
**Width:** 2.5 in. (6.4 cm)  
**Weight w/o cord:** 7 oz. (198 g) or less  
**Power Requirements:** 4 to 9 volts  
**Current Draw:** Lower Power Mode - average @ 5 VDC-40mA  
 Medium Power Mode - average @ 5 VDC-125mA  
 High Power Mode - average @ 5 VDC-175mA  
**Standby Current:** < 200µA @ 5V

**Environmental****Temperature**

**Operating:** -0°C to 50°C  
**Storage:** -40°C to +70°C

**Humidity:** 95% RH, non condensing at 50°C

**Shock:** 10 drops 5 ft. to concrete @ room temperature

**ESD:** Functional after 15KV discharge

**Agency:** FCC Class B, CE

**Seal Rating:** IP52

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