

## IMAGETEAM™ 4410 HD/HD10

### Hand Held 2D Image Readers



#### Features

*Supports All Popular 2D Symbolologies - IT4410 supports all popular matrix and stacked linear symbolologies: MaxiCode, Data Matrix, QR, and PDF417. Additional symbolologies 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 - The IT4410 has a bright, intuitive aiming line.*

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

*2D Print Quality Assessment (PQA) - An easy and inexpensive approach to providing test results useful for 2D bar code symbol process control, and improvement of the overall 2D data acquisition system.*

The Hand Held Products IMAGETEAM™ (IT) 4410 High Density Image Reader is a hand held input device for reading and decoding two dimensional (2D) symbolologies. The IT4410 offers 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 symbolologies, such as MaxiCode, PDF417, 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 symbolologies will be added based on market demand.

Because the IT4410 is a fixed focus device, four 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/LX) models of the IT4410 are highlighted in a separate data sheet.

# IMAGETEAM™ 4410 HD/HD10 Specifications

## Performance

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

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

HD10 Working Range: (typical)	10 mil QR (.025 cm)	10 mil Data Matrix (.025 cm)	5 mil Linear (.013 cm)
Near	2.0 in. (5.1 cm)	2.2 in. (5.6 cm)	2.75 in. (7.0 cm)
Far	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, MicroPDF417, 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), British Post, Canadian Post, Japanese Post, KIX (Netherlands) 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



Complies with EMC 89/336/EEC  
and LVD 73/23/EEC

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