



IMAGETEAM™ 4000 SR/SF **IMAGETEAM™ 4100 SR/SF** *Miniature Image Engines*



Optical Subassembly Only



Features

Powered by Adaptus™ Imaging Technology - Delivers extraordinary reading performance to enable ease-of-use and reader versatility.

Small, Lightweight Form Factor - Designed for ease-of-integration, the IT4X00 SR/SF Series engines are ideal multi-functional devices for the next generation of mobile products and integrated kiosk solutions.

Durable - Incorporating sensor technology with no moving parts, the IT4X00 SR/SF Series engines are built to withstand 2500G of shock.

Point and Shoot Scanning - The IT4X00 SR/SF Series image-based readers enable full omni-directional reading of all bar codes, with no swiping required.

Decoding Algorithms - Autodiscriminate between supported symbologies and fonts. Read all major linear, stacked linear, and matrix bar codes as well as machine-readable fonts used in Optical Character Recognition (OCR).

New Bright Aimer - Distinctive green aimer provides superior contrast, ensuring exceptional point-and-shoot performance.

The IMAGETEAM 4000 SR/SF and the IMAGETEAM 4100 SR/SF (IT4X00 SR/SF Series) combine the latest in CMOS image sensor technology, illumination, and optics to create compact, lightweight optical modules capable of reading 1D linear codes, 2D stacked/matrix codes, OCR fonts, and postal codes. In addition, the IT4X00 SR/SF Series engines capture digital images.

The IT4X00 SR/SF Series engines build on HHP's legacy of reading the most comprehensive list of symbologies by adding valued features that are enabled by digital imaging. The IT4X00 SR/SF Series engines deliver full omni-directional (360°) scanning with three optical configurations, three mounting options, and three software licensing modules. This enables OEMs and third-party manufacturers to integrate the benefits of image-based scanning into a variety of devices, including hand held computers, medical instruments, diagnostic equipment, lottery terminals, vending machines, and robotics.

Designed for ease-of-integration and superior durability, the IT4X00 SR/SF Series engines are ideal for the most demanding environments. Incorporating sensor technology with no moving parts, the IT4X00 SR/SF Series engines are built to withstand 2500 G of shock. With an LED-based aiming and illumination system, the IT4X00 SR/SF Series engines eliminate the need for inconvenient "laser warning" documents and labels. A unique power management design provides extended battery life.

Two different optical designs provide OEMs the flexibility required to address various application-specific needs. The IT4X00 SR/SF Series engines read wide codes, that include PDF417, up to 11 inches away. With a focal setting at 7 inches, the IT4X00 SR/SF Series engines are ideal for codes found in the transportation industry. The IT4000 SF and IT4100 SF (Smart Focus) have the best depth of field HHP offers for reading PDF417 on driver licenses (DL). With over 3 inches of reading range on 6.6 mil PDF417 and the ability to read 100% UPC up to 8 inches away, the IT4000 SF and IT4100 SF are the ideal solutions for mobile applications seeking suitable linear performance coupled with the ability to capture DL information.

To learn how the IT4X00 SR/SF Series engines can work for you, contact us at any of the locations listed on the back or visit us at www.hhp.com.

Upgrade your image.



IMAGETEAM™ 4X00 SR/SF Series Specifications

Performance

Focal Point:

IT4000/4100 SR 7 inches (17.8cm) from lens plate
 IT4000/4100 SF 4.5 inches (11.4cm) from lens plate

IT4000/4100 SR Working Range:	8 mil Linear (.020cm)	10 mil PDF417 (.025cm)	13 mil UPC (.033cm)	15 mil PDF417 (.038cm)	15 mil Data Matrix (.038cm)	35 mil MaxiCode (.089cm)
Near	3.5 in. (8.9cm)	3.1 in. (7.9cm)	2.5 in. (6.4cm)	3.5 in. (8.9cm)	3.7 in. (9.4cm)	2 in. (5.1cm)
Far	7.6 in. (19.3cm)	9 in. (22.9cm)	12.5 in. (31.8cm)	11.2 in. (28.5cm)	6.5 in. (16.5cm)	13 in. (33cm)

IT4000/4100 SF Working Range:	6.6 mil PDF417 (.017cm)	7.5 mil Linear (.019cm)	10 mil Linear (.025cm)	13 mil UPC (.033cm)	10 mil PDF417 (.025cm)	15 mil Data Matrix (.038cm)
Near	2.8 in. (7.1cm)	2.5 in. (6.4cm)	2.2 in. (5.6cm)	2.3 in. (5.8cm)	2.2 in. (5.6cm)	2.3 in. (5.8cm)
Far	6 in. (15.2cm)	6.5 in. (16.5cm)	7.6 in. (19.3cm)	8.9 in. (22.6cm)	7.6 in. (19.3cm)	6 in. (15.2cm)

Rotational Sensitivity: 360°
 Viewing Angle: ±45°
 Ambient Light: Total darkness to 100,00 lux (full sunlight)
 Aiming:
 Illumination LEDs 626nm ±30nm
 Aiming LEDs 526nm ±30nm

Symbologies

2 Dimensional: PDF417, MicroPDF417, MaxiCode, Data Matrix, QR Code, Aztec, Aztec Mesa, Code 49, UCC Composite, Snowflake*, Dataglyphs*
Linear: Code 39, Code 128, Codabar, UPC, EAN, I 2of5, RSS, Code 93, Codablock, BC 412*
 *available to licensed users
Postal: Postnet (US), Planet Code, BPO 4 State, Canadian 4 State, Japanese Post, Kix (Dutch Post)
OCR Fonts: OCR-A, OCR-B

Mechanical

Mounting: Option 1 – 4X00XX-11 Self-tapping screws
 Option 2 – 4X00XX-12 Through hole mounting also with mounting "ears"
 Option 3 – 4X00XX-13 Machine screws with inserts in mounting "ears"

IT4000 SR/SF Size: .564 in. Depth x .810 in. Width x .450 in. Height
 (14.33 mm Depth x 20.57 mm Width x 11.43 mm Height)
Weight: 0.154 ounces (4.36 grams)

IT4100 SR/SF Size: .659 in. Depth x 1.1 in. Width x .450 in. Height
 (16.74 mm Depth x 27.94 mm Width x 11.43 mm Height)
Weight: 0.18 ounces (5.1 grams)

Electrical

Operational Input Voltage:
Imager 3.3 VDC ±5% (23°C)
LEDs 3.0 VDC to 9.0 VDC (23°C)
Current Draw:
Imager Maximum Operating Current – 35 mA
 Standby Current – 3 mA
LEDs Average Current – 150 mA
 Standby Current – <10 uA

Environmental

Temperature Ranges:
Operating -10° to +50°C (-23° to 122°F)
Storage -40° to +70°C (-40° to 158°F)
Humidity: 5% to 95% RH, non-condensing at +32°C (90°F)
Shock: 2500G
Vibration: 10G over a frequency range of 5Hz to 500Hz
 1G over a frequency range of 500 Hz to 2,000 Hz



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