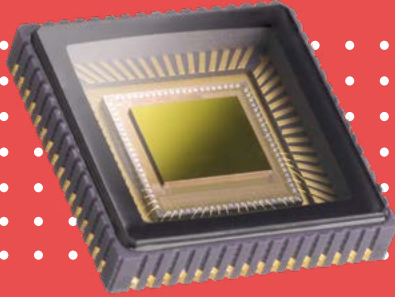




LYNRED®

See Beyond Horizons

INFRARED DETECTORS



EYESENTIAL SW™

640 x 512 - 10µm - InGaAs



EYESENTIAL™ is particularly suited to SWIR applications such as machine vision, spectrometry or hand held imagers.

LYNRED InGaAs technology provides leading edge performance in terms of sensitivity, noise, dark current and operability.

SEE BEYOND WHAT IS VISIBLE



EASY INTERPRETATION



VISIBLE LIKE



ENHANCE SORTER DETECTION CAPABILITY



DEFECTS DETECTION IN PROCESSING

MACHINE VISION

SPECTROMETRY

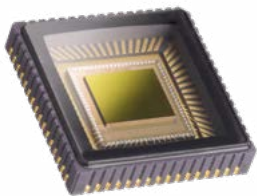
HAND HELD IMAGER

FIXED SURVEILLANCE

MOBILE SURVEILLANCE



ORDERING REFERENCE: EYESENTIAL SW™



●● SEE BEYOND WHAT IS VISIBLE ●●

MULTI-PURPOSE



VERSATILE



LOW NOISE



COMPACT



**EASY
INTERPRETATION
VISIBLE-LIKE**

ARRAY FEATURES

Format	■ 640 x 512
Pixel pitch	■ 10µm
Sensor type	■ InGaAs PIN-Photodiode
Spectral response	■ 0.9 - 1.7µm

ROIC (READ-OUT INTEGRATED CIRCUIT)

Integration type	■ Snapshot / Global shutter
Charge handling capacity	■ 70 10 ³ e- / 90 10 ³ e- / 450 10 ³ e-
Readout modes	■ IWR, ITR
Exposure time	■ 1µs minimum
Maximum full frame rate	■ 300 fps full frame, 1200 fps with 320x256 resolution
Maximum pixel rate	■ 100 MPixels/s
Video output	■ Digital 14 Bits
Specific operating mode	■ Individual line selection (for spectrometry)

TYPICAL PERFORMANCES

Quantum efficiency (QE)	■ 70% from 1µm to 1.6µm
Noise with ROIC	■ 55 e- (for 90 ³ e- handling capacity)
Dark current	■ 15fA @ 21°C
Array operability	■ >99.5%
Non uniformity without correction	■ 4%

PACKAGING

Type	■ Standard LCC / 1.016 pin pitch / 64 pins
Window	■ Borosilicate glass
Operating and storage temperature	■ [-20°C; +60°C]

AVAILABLE SERVICES

Technical training and support
Evaluation kit
Electronic and mechanical reference design



**LYNRED HEADQUARTERS
DEVELOPMENT & PRODUCTION CENTER**

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