

# atto640

640 x 480 – 12  $\mu\text{m}$

Provided in analog or digital output, the LYNRED Atto640 thermal imaging sensor is ideal for SWaP applications.

The Atto640 is the smallest 60Hz sensor on the market with a pixel pitch of 12  $\mu\text{m}$ .

## THE SMALLEST **VGA 12 $\mu\text{m}$** THERMAL IMAGING SENSOR ON THE MARKET



**BEST IN CLASS SWAP CHARACTERISTICS**



**CRISP MOVING IMAGE**



**SEAMLESS INTEGRATION INTO VOLUME MANUFACTURING ENVIRONMENTS**

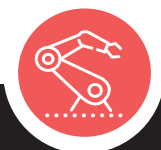
LEISURE



SURVEILLANCE

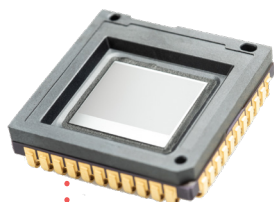


INDUSTRY



# THE SMALLEST **VGA 12 $\mu\text{m}$** THERMAL IMAGING SENSOR ON THE MARKET

## atto<sup>640</sup>



### BEST IN CLASS SWAP CHARACTERISTICS

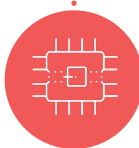
Compact, affordable optics	■ 12 $\mu\text{m}$ pixel pitch
Smallest VGA sensor on the market	■ 16.5 x 16.5 mm <sup>2</sup> package ■ with Lynred wafer-level packaging technology
Low-power for optimal battery usage	■ Low power <150mK @ 60Hz (analog output) ■ Low power <300mK @ 60Hz (digital output)

### CRISP MOVING IMAGES

Sharp contrast	■ Thermal sensitivity < 60mK (f/1, 300K, 30Hz)
Flicker-free image	■ Frame rate up to 60Hz ■ Thermal time constant 10ms
High uniformity	■ Operability > 99.5%

### SEAMLESS INTEGRATION

High volume compliant	■ Surface Mount Device (J-Lead44) compatible with standard off-the-shelf socket ■ Wafer Level Packaging & high-volume assembly processes ■ JEDEC's reflow and handling standards compatible
QVGA-compatible product platform	■ Footprint compatible with QVGA products: PICO384-053 (17 $\mu\text{m}$ ) and ATTO320 (12 $\mu\text{m}$ )
Flexible configuration	■ Full access to sensor features (I <sup>2</sup> C) ■ Free run or external trigger mode
Output format	■ Analog : 1 single output ■ Digital : 14 bits parallel



SWaP



IMAGE QUALITY

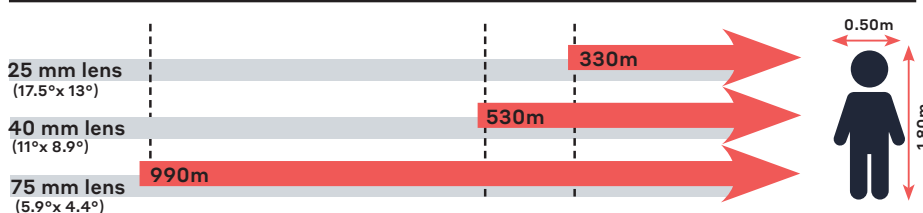


LOW POWER CONSUMPTION



SEAMLESS INTEGRATION

### Recognition distances for human measuring 1.80 m x 0.50 m



Range for Johnson's criteria, target deltaT = 2K, perfect atmospheric and optics transmissions, theoretical square pixel.



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