

ATTO640-02 PRODUCT RANGE

640 x 480 – 12 μm

Based on continuous customers feedback, LYNRED has improved its 12 μm technology for the ATTO products family.

This thermal image sensor is provided in analog output (ATTO640-02) or digital 14-bit parallel output (ATTO640D-02).

Ideal for SWaP applications, it is the smallest 60Hz sensor on the market with a pixel pitch of 12 μm.

HIGHER SENSITIVITY FOR LIMITLESS APPLICATIONS



BEST IN CLASS SWAP CHARACTERISTICS



FLUID AND CRISP IMAGES



SEAMLESS INTEGRATION

LEISURE



SURVEILLANCE



DEFENSE

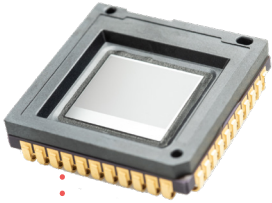


THERMOGRAPHY



HIGHER SENSITIVITY FOR LIMITLESS APPLICATIONS

ATTO640-02



SWaP



IMAGE QUALITY



LOW POWER CONSUMPTION



SEAMLESS INTEGRATION

BEST IN CLASS SWAP CHARACTERISTICS

Reduced optic size and cost	■ 12 μm pixel pitch
Smallest VGA sensor on the market	■ 16.5 x 16.5 mm ² package ■ With LYNRED wafer-level packaging technology
Low-power for optimal battery life	■ Low power <150mW @ 60Hz (analog output) ■ Low power <300mW @ 60Hz (digital output)

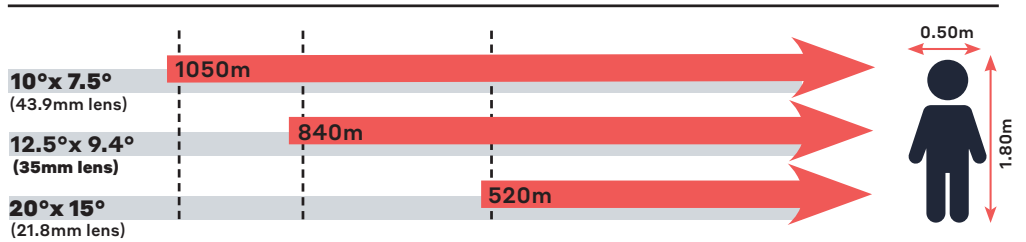
FLUID AND CRISP IMAGES

Resolution	■ 640 x 480
Sharp contrast	■ Thermal sensitivity : Standard : < 50mK (f/1, 300K, 30Hz) Premium : < 40mK (f/1, 300K, 30Hz) ■ [-40°C; +85°C] operating temperature range
Fluid and smooth image	■ Frame rate up to 60Hz
High uniformity	■ Operability > 99.8%

SEAMLESS INTEGRATION

High volume compliant	■ Surface-mount Device (J-Lead44) compatible with standard off-the-shelf socket ■ Wafer-level packaging & high-volume assembly processes ■ Compatible with JEDEC's reflow and handling standards
QVGA-compatible product platform	■ Footprint compatible with QVGA products: PICO384-053 (17 μm) and ATTO320 (12 μm)
Flexible configuration	■ Full access to sensor features (I ² C) ■ Free-run or external trigger mode
Output format	■ Analog ATTO640-02 : 1 single output ■ Digital ATTO640D-02 : 14-bit parallel

Human recognition distance with f/1 optics (perfect OTF & 88% typical transmission)



Range for Johnson's criteria @ 50% probability, 2K DeltaT vs background, perfect atmosphere, real LYNRED pixel MTF, sensor NETD = 50mK



LYNRED HEADQUARTERS
Avenue de la Vauve - CS 20018
91127 Palaiseau - France
Phone +33 (0)1 60 92 18 30
info@lynred.com

DEVELOPMENT AND PRODUCTION CENTER
Actipole - CS 10021 - 364, route de Valence
38113 Veurey-Voroize - France
Phone +33 (0)4 76 28 77 00
info@lynred.com