

ATTO640D-02™

640 × 480 – 12µm

INFRARED DETECTOR

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

Ideal for SWaP applications, it is the smallest VGA thermal sensor on the market.

HIGHER SENSITIVITY FOR LIMITLESS APPLICATIONS



BEST IN CLASS SWAP CHARACTERISTICS



FLUID AND CRISP IMAGES



SEAMLESS INTEGRATION

LEISURE



SURVEILLANCE



DEFENSE



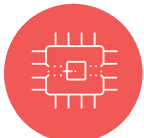
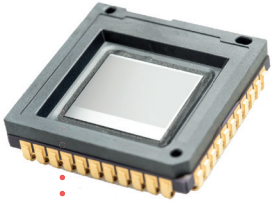
THERMOGRAPHY



ORDERING REFERENCES: ATTO640D-02™, ATTO640D-02+™

HIGHER SENSITIVITY FOR LIMITLESS APPLICATIONS

ATTO640D-02™



SWaP



IMAGE QUALITY



LOW POWER CONSUMPTION



SEAMLESS INTEGRATION

BEST IN CLASS SWAP CHARACTERISTICS

Reduced optic size and cost	■ 12µm 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	■ <300mW @ 60Hz (digital output mode) ■ <150mW @ 60Hz (analog output mode)

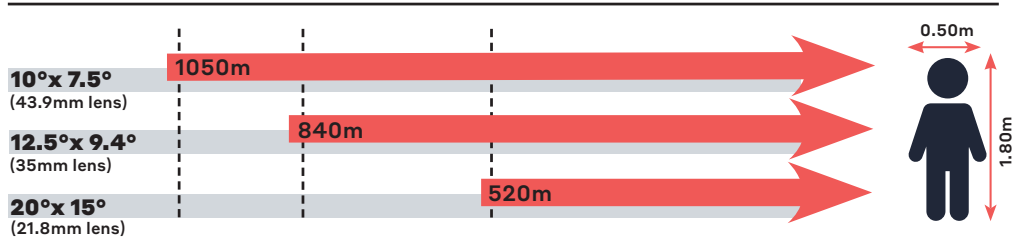
FLUID AND CRISP IMAGES

Resolution	■ 640 x 480
Sharp contrast	■ Thermal sensitivity: ATTO640D-02™: < 50mK (f/1, 300K, 30Hz) ATTO640D-02+™: < 40mK (f/1, 300K, 30Hz) ■ System NETD: 15-20mK using adapted noise reduction algorithms ■ [-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™ (17µm) and ATTO320™ (12µm)
Flexible configuration	■ Full access to sensor features (I ² C) ■ Free-run or external trigger mode
Output format	■ 14-bit parallel ■ Analog

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

LYNRED ASIA PACIFIC PTE LTD
5 Shenton way,
#22-04 UIC Building
068808 Singapore
info@lynred.com

LYNRED USA
373 US Highway 46W
Fairfield, NJ 07004, USA
Phone +1 973.882.0211
info@lynred-usa.com