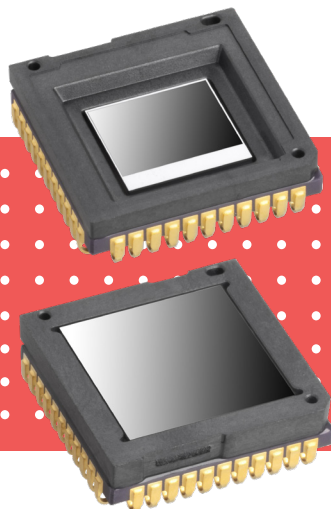




LYNRED®

See Beyond Horizons



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.



INFRARED DETECTOR

ATTO640D-04/04+/04W™

640 x 480 – 12µm

SEAMLESS INTEGRATION FOR LIMITLESS APPLICATIONS



**BEST IN CLASS SWAP
CHARACTERISTICS**



FLUID AND CRISP IMAGES



**BETTER IQ AND EASIER
INTEGRATION**

LEISURE

SURVEILLANCE

THERMOGRAPHY

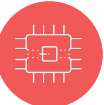
DEFENSE



ORDERING REFERENCE: **ATTO640D-04™**
ATTO640D-04+™
ATTO640D-04W™

TECHNICAL DATA NOT CLASSIFIED UNDER EXPORT CONTROL REGULATION

●● SEAMLESS INTEGRATION FOR LIMITLESS APPLICATIONS ●●



SWaP



IMAGE QUALITY



LOW POWER
CONSUMPTION



SEAMLESS
INTEGRATION



LYNRED HEADQUARTERS DEVELOPMENT & 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 USA

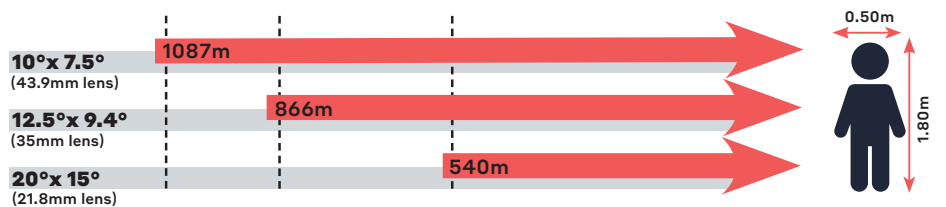
373 US Highway 46W
Fairfield, NJ 07004, USA
Phone +1 973.882.0211
info@lynred-usa.com

NIT (New Imaging Technologies) Premium SWIR by LYNRED

1 impasse de la Noisette
91370 Verrières-le-Buisson - France
Phone +33 1 64 47 88 58
info@new-imaging-technologies.com

	ATTO640D-04™	ATTO640D-04+™	ATTO640D-04W™
BEST IN CLASS SWAP CHARACTERISTICS			
Reduced optic size and cost	■ 12µm pixel pitch		
Smallest VGA sensor on the market	■ < 17.3 x 17.3 x 4.9 mm3 (including J-Lead pins) ■ With LYNRED wafer-level packaging technology		
Low-power for optimal battery life	■ < 320 mW @ 60 Hz (digital output mode) ■ < 150 mW @ 60 Hz (analog output mode)		
FLUID AND CRISP IMAGES			
Resolution	■ 640 x 480		
Sharp contrast	■ < 40 mK (30Hz, f/1, 300K)	■ < 35 mK (30Hz, f/1, 300K)	■ < 45 mK (30Hz, f/1, 300K)
	■ [-40°C; +85°C] operating temperature range		
Fluid and smooth image	■ Frame rate up to 60Hz		
High uniformity	■ Operability :		
	■ > 99.8%	■ > 99.8%	■ > 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		
	■ Protective Germanium window for ATTO640D-04W™		
QVGA-compatible product platform	■ Footprint compatible with QVGA products: PICO384™ series (17µm) and ATTO320™ (12µm)		
Flexible configuration	■ Full access to sensor features (I²C) ■ Free-run or external trigger mode		
Output format	■ 14-bit parallel Digital		
	■ Analog		

ATTO640D-04™: 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 = 35mK