





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 µm.

THE SMALLEST **VGA 12 µm**THERMAL IMAGING SENSOR ON THE MARKET



BEST IN CLASS SWAP CHARACTERISTICS



CRISP MOVING IMAGE



SEAMLESS INTEGRATION INTO VOLUME MANUFACTURING ENVIRONMENTS

LEISURE

SURVEILLANCE

INDUSTRY









RÉF. 06/2020/01-LYNRED & istock pictures-Printed in france Technical characteristics described in this data sheet are for information only. They are not contractual and may change without prior notice.

•• THE SMALLEST **VGA 12 µm** THERMAL IMAGING SENSOR ON THE MARKET ••

atto⁶⁴⁰









IMAGE QUALITY



LOW POWER CONSUMPTION



SEAMLESS INTEGRATION

BEST IN CLASS SWAP CHARACTERIS	STICS			
Compact, affordable optics	■ 12 µm pixel pitch			
Smallest VGA sensor on the market	■ 16.5 x 16.5 mm² package ■ with Lynred wafer-level packaging technology			
Low-power for optimal battery usage	■ Low power <150mW @ 60Hz (analog output)			
	■Low power <300mW @ 60Hz (digital output)			
CRISP MOVING IMAGES				
Sharp contrast	■ Thermal sensitivity < 60mK (f/1, 300K, 30Hz)			
Flicker-free image	Frame rate up to 60HzThermal 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 µm) and ATTO320 (12 µm)			
Flexible configuration	■ Full access to sensor features (I²C)			
	■ Free run or external trigger mode			
Output format	Analog: 1 single output			
	■ Digital : 14 bits parallel			

Recognition distances for human measuring 1.80 m \times 0.50 m

	1	!	I I	0.50m
25 mm lens			330m	•
(17.5°x 13°) 40 mm lens		530m		
(11°x 8.9°)		i	i	
75 mm lens (5.9°x 4.4°)	990m		-	

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











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