

LWIR Continuous zoom – commercial off the shelf lens

# PECAN

24 – 105 mm F/1.55 LWIR Continuous zoom Lens



## FEATURES / APPLICATIONS / CAPABILITIES

- Suitable for various applications
- Cost effective solution for HLS
- Rugged design for harsh environments

PARAMETER		VALUE	NOTES
Main	Sub		

OPTICAL			
<b>Focal Length / F#</b>		24 - 105mm / F1.55	Nominal values
<b>Detector (FPA) type / size</b>		640 x 480 x 17 μ	Effective detector size of 10.88 x 8.16 mm
<b>FOV (degrees)</b>		Wide: 26°(H) x 19.5° (V) Narrow: 5.95° (H) x 4.45° (V)	640 x 480 x 17 μ
Optical Coatings			
	<b>All internal surfaces</b>	High efficiency AR coating	Average transmission of entire lens with HD: 87%
	<b>Front surface</b>	High durability AR coating	DLC is available upon request: Average transmission of entire lens with DLC: 81%
<b>Optical Total lens track</b>		130 mm	Nominal from 1 <sup>st</sup> surface vertex to detector FPA
MECHANICAL			
<b>Mechanical Back Focal Length</b>		9 mm	Nominal
<b>Zoom mechanism/ Focus</b>		Motorized	5m – Infinity for Wide 10m – Infinity for Narrow
<b>Thru zoom boresight</b>			Better than 0.15 mm
<b>NFOV boresight retention</b>			Better than 0.045 mm
<b>Total Weight</b>		875 grams	Nominal
<b>Ext. Dimen ø x length (mm)</b>		95 x 119 (Please refer to MICD)	
ELECTRICAL			
<b>Power Input</b>		12VDC, 1.0A	Nominal
<b>Communication Protocol</b>		RS-422/232 Full Duplex	Baud rate 19,200, n, 8, 1
ENVIRONMENTAL			
<b>Operating/Storage Temperature</b>		-20°C to +60°C / -40°C to +80°C	
<b>Shock and Vibrations</b>		Per applicable standard	
<b>Front lens sealing</b>		IP67	For front element only

