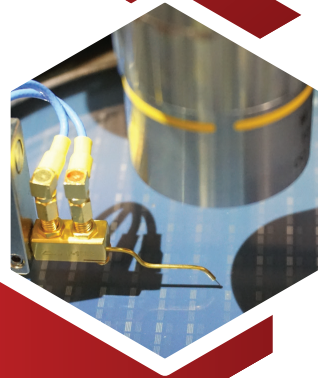




WiDy
Sens

It makes SenSe!



WiDy Sens

High Sensitivity & HDR SWIR camera

Dual mode InGaAs sensor (Lin & Log)
640 x 512 Pixels Resolution 15 μ m Pitch
Near Infrared Imaging up to 1700nm



niT

New Imaging Technologies

www.new-imaging-technologies.com

▶ Key Features

- ☐ Linear & logarithmic:
best trade-off on market between:
 - o High sensitivity
 - o High dynamic range (120dB)
- ☐ High QE InGaAs from 900nm to 1700nm
- ☐ VGA resolution , 640*512 effective pixels
- ☐ Bad Pixels Replacement and smart Non Uniformity Correction
- ☐ USB3.0, CamLink & GigE interface
- ☐ Available in Compact & Embedded

▶ Applications

- ☐ Active Imaging
- ☐ Laser Beam profiling
- ☐ Metrology (microscopy, hyperspectral)
- ☐ Process control (industry, semiconductors, food, ...)
- ☐ Defense and security
- ☐ Airborne cameras (UAV)

Imagine yours...

▶ Technical Specifications

Sensor	NSC1601T-SI	Operating Mode	TEC on/off
Material	InGaAs	Cooling capacity	$\Delta T^\circ = 30^\circ C$
Resolution	640 x 512 pixels	Trigger	IN/OUT (LVTTTL)
Pixel size	15 μm x 15 μm	Trigger delay	Adjustable
Spectral response	0.9 to 1.7 μm	Dimensions	46 * 46 * 57 mm
Dual response	Linear (CTIA) Low & High Gain Logarithmic	Weight	< 215 g
Modes	IWR/ITR, CDS, ROI	Lens mount	C-Mount native
QE	>70%	Power consumption	
Output	USB3.0 - CamLink - GigE	TEC off	Standard global shutter < 2.6W Gated mode <4W
Frame rate	up to 230fps full frame	TEC on	Standard global shutter < 6.6W Gated mode <8W
Partial Reading Mode	down to 16x16	Operating Temp	-40 $^\circ C$ to + 65 $^\circ C$
Integration Time	CTIA 10 μs to 5s LOG 10 μs to 10 ms	GUI	WiDyVISION WiDyCAM
Gating mode	100ns to 9 μs	SDK	USB, GigE Windows & Linux

Operating Modes	CTIA High Gain		CTIA Low Gain		LOG
	Standard	Gated	Standard	Gated	
Sensor Noise	50e-	125e-	270e-	290e-	340e-
Well capacity	> 17Ke-	> 17Ke-	> 380Ke-	>230Ke-	≈ 500Me-
Dynamic Range	49dB	44dB	63dB	58dB	120dB

Products and specifications are subject to change without notice.