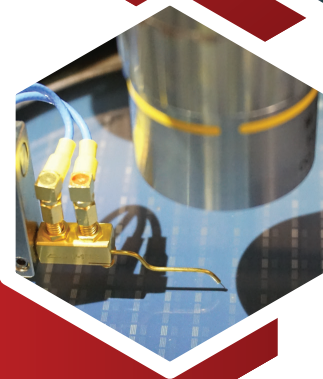




WiDy
Sens

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 & Analog 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
Material	InGaAs
Resolution	640 x 512 pixels
Pixel size	15 μm x 15 μm
Spectral response	0.9 to 1.7 μm
Dual response	Linear (CTIA) Low & High Gain Logarithmic
Modes	IWR/ITR, CDS, ROI
QE	>70%
Output	USB3.0 - CamLink - GigE-Analog
Frame rate	up to 230fps full frame
Partial Reading Mode	down to 16x16
Integration Time	10μs mini
Gating mode	100ns to 9μs
Operating Mode	TEC on/off

Cooling capacity	ΔT° = 30°C
Trigger	IN/OUT (LVTTTL)
Trigger delay	Adjustable
Dimensions	46 * 46 * 57 mm
Weight	< 215 g
Lens mount	C-Mount native
Power consumption	Standard global shutter < 2.6W
	TEC off Gated mode <4W
	Standard global shutter < 6.6W
	TEC on Gated mode <8W
Operating Temp	-40 °C to + 65 °C
GUI	WiDyVISION, WiDyCAM, WiDyCIRENE & NITViewerGIGE
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.