



Ordering Informations

Commercial Reference

Commercial reference	Description	Ordering information
LiSa SWIR 2048 M-STE2	LineScan SWIR Cameralink Camera	9SEC2301AE31MC0# # : product revision

Included Accessories

- Power and trigger Cable (Hirose HR10 connector)
- 12V power supply
- Cardboard shipping and storage box

Optional Accessories

- Hardened protective case

Custom variants (OEM)

For any specific requirements contact your sales representative or support@new-imaging-technologies.com



FUNCTIONALITIES

Camera

Main camera features (For full documentation contact support@new-imaging-technologies.com):

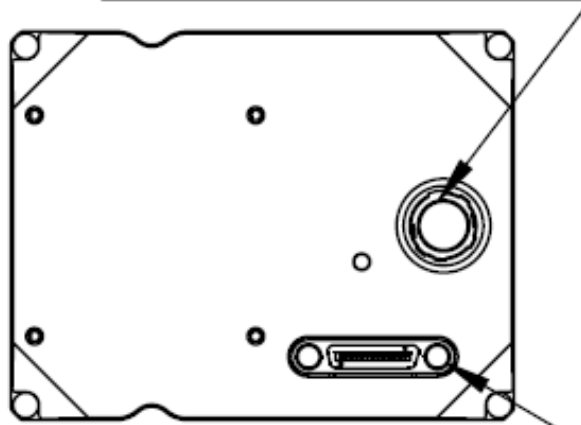
Sensor characteristics	Sensor type	InGaAs (0.9-1.7 spectral response)
	Pixel pitch	8 μ m
	Pixel height	14 μ m
	Resolution	2048x1
	Sensor noise	<ul style="list-style-type: none"> High gain (CDS): <math>90e^{-}</math> Medium: <math>370e^{-}</math> Low: <math>2200e^{-}</math>
	Dynamic range	<ul style="list-style-type: none"> High gain (CDS): 55dB typical Medium: 62dB typical Low: 66dB typical
	Peak QE	>80%
Camera features	Frame rate	>110kHz Full resolution
	Sensor Readout	Global shutter ITR (Integrate Then Read) and IWR (Integrate While Read).
	Sensor modes	3 gain setting: High, Medium, Low
	Output data range	14 bit ADC – (4400DL effective data range)
	Output Type	Cameralink base 8/10/12/14 bits pixel formats. Configurable output geometry: 1X_1Y / 1X2_1Y / 1X3_1Y
	Exposure time	Minimum Integration time: 1 μ s Controlled by camera register or Trigger width
	Trigger	Internal/External (LVTTTL) Software Trigger Trigger over Cameralink
	Trigger delay	User-Selectable
	Partial reading mode	Region of Interest (ROI). User-Selectable with a step of 8 pixels. Maximum FPS increase with reduced ROI.
	AGC (Histogram Stretching)	Once/Manual. Once: Automatic selection of gain and offset by camera based on next captured line. Manual: User-Selectable gain and offset.
	NUC correction	Correction 1-Point or 2-Point. 2 Point factory calibrated. (25°C sensor Temperature)
	Bad pixel correction	Factory calibrated Bad Pixel Map
	File Management	Upload/Download via camera communication interface Firmware Update. Correction table (NUC and BPM) download and upload. File management software provided (Windows compatible)
	Temperature monitoring	Mainboard & Image Sensor
	User Configuration	4 User-defined presets. Selectable boot-up preset.
Image Flip	Horizontal	

Environment and mechanical characteristics	Power consumption (12V supply)	<ul style="list-style-type: none"> • Camera: <4W • Cooling: User-Selectable TEC power limit <ul style="list-style-type: none"> ○ Off ○ Low : <1W ○ Medium : <2W ○ High : <5W (Default, user defined value)
	Supply voltage range	6 to 24V (Overvoltage, reverse polarity protection). POCL
	Storage temperature	-40 to +80°C
	Operating temperature	-40 to +71°C
	Size (WxHxL, mm)	45.4 x 75 x 58mm
	Weight	280g
	Lens mount	C-Mount
Software	Control protocol	GenCP (Genicam) compliant
	NIT Software	NITGenicamControlTool (Windows, camera control only)
	Third party	Genicam/GenCP compliant software

Electrical ICD

Reference	Designation	Manufacturer
HR10-10R-12SA	Connector Female 12 positions	Hirose

Power supply & Trigger

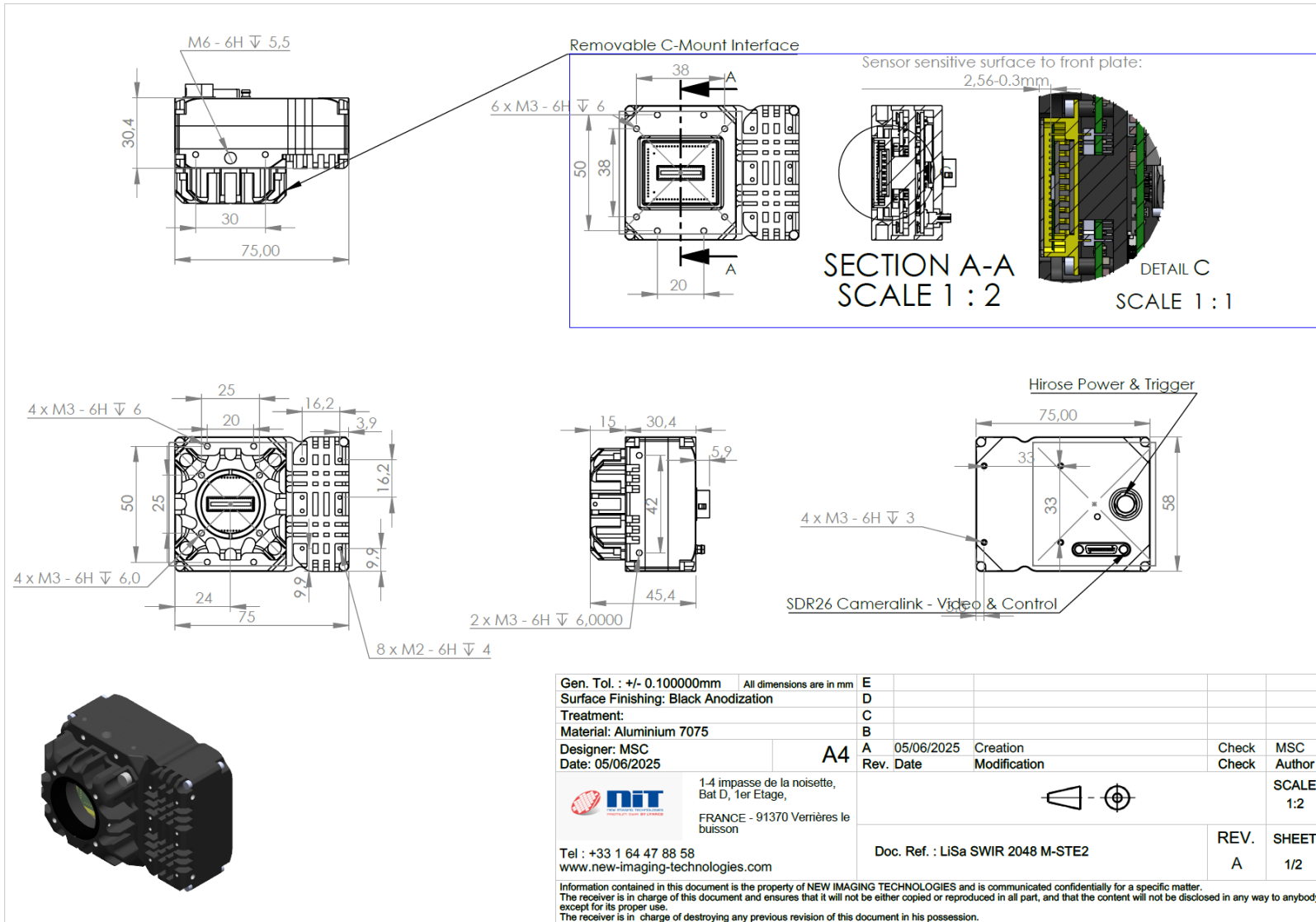


SDR26 Cameralink - Video & Control

Reference	Designation	Manufacturer
12226-1150-00FR	SDR26 connector	3M

Hirose (HR10) Connector Pinout		
Pin	Signal Name	Cable color
1	Power (6-24V)	Red/Purple/(Orange)
2	Power GND	Blue/Brown
3	Trigger OUT2	White
4	Trigger OUT1	Yellow
5	NC	
6	NC	
7	Reserved	
8	Power GND	Blue/Brown
9	Power (6-24V)	Red/Purple/(Orange)
10	Trigger IN/OUT (LVTTTL)	Green
11	Not connected	
12	Trigger GND	Black

Mechanical ICD



Products and specifications discussed herein are for evaluation and reference purposes only and are subject to change by NIT without notice. Products are only warranted by NIT to meet NIT's production data sheet specifications.



NIT

1 Impasse de la noisette, Bat D- 1^{er} étage, BP426

91370 Verrières Le Buisson Cedex, France

Tel +33(0) 1 64 47 88 58

www.new-imaging-technologies.com

info@new-imaging-technologies.com

NIT, New Imaging Technologies and Native WDR, are trademarks of New Imaging Technologies.

