

High-speed External Frame Grabbers

# CGX-2S-CL SlimLINK™

DATA SHEET

CRONTIUM

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PRELIMINARY



## 1. OVERVIEW

- Base, Dual-base, Medium and Full CAMLINK™ configurations supported at up to 85 MHz clock.
- Monochrome and color cameras.
- External frame and line triggering for line-scan cameras
- Camera configuration.
- Encoder input supports fractional frequency division
- High-speed differential control outputs
- Compatible with any small form-factor computers: single board, SOM, Pico, NUC and others.
- Low power consumption: powered directly by the host over USB cable
- Reduces length and cost of CAMLINK™ cables
- Provides longer life for imaging systems
- Tiny size allows easy mounting in direct proximity to imaging device.



**CGX-2S-CL SlimLINK™** grabbers are low-cost, high-speed USB imaging devices, interfacing CAMLINK™ area and line-scan cameras. Despite its very small size and affordable price, the **SlimLINK™** grabbers deliver impressive performance and possess a reach set of features.

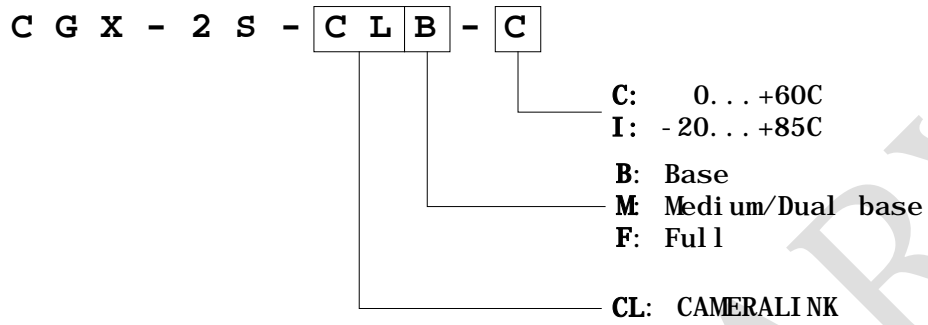
The following summarizes key features of SlimLINK™ grabber:

- Support of up to 85 MHz clock in all Camera Link configurations: base, medium, and full.
- Support for area and line-scan cameras, either color or monochrome.
- External triggering, including encoder fractional division factor for line-scan cameras.
- True dual-channel USB3.0 interface to provide full bandwidth in all Camera Link configurations (up to 680 MB/Sec).
- Small and light-weight form factor: it fits easily anywhere in the target system, including a direct proximity to the camera.
- Low power requirements, powered directly by the host over USB cable.



### 1.1 ORDERING CODE

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PRELIMINARY



## 2. SPECIFICATION

### 2.1 GENERAL

GENERAL	
Camera interface	CAMLINK®
Maximum camera clock	85 MHz
Supported configurations	Base
	Medium <a href="#">Note 1</a>
	Full
Number of cameras	1 or 2 <a href="#">Note 1</a>
Camera image format	RGB, Bayer, monochrome
Acquired image format	Planar/Configurable <a href="#">Note 3</a>
Camera connector	2 x Sub-Micro D26 <a href="#">Note 1</a>
External triggers	Line and frame
Triggering modes	External, software, free run
IO connector	Micro DIB9
Encoder division	Fractional
Host interface	USB 3.0
Host connector	Micro USB 3.0
Number of host channels	1 or 2 <a href="#">Note 1</a>
Power	USB powered
Dimensions, mm	130 x 70 x 12
Weight, g	150
Temperature, °C	0 ... +50 <a href="#">Note 2</a>
Humidity, %	10 ... 90, non-condensing
Certification	CE, FCC Class A

#### Notes

1. See [section 2.2](#) for possible camera/grabber/host configurations
2. Contact Crontium for industrial temperature range of -20...+85 °C
3. Acquired image format is compatible with almost any commercial image processing tool, as well as with popular free OpenCV library.



## 2.2 CONFIGURATION MATRIX

Feature	Grabber model		
	CGX-2S-CLB	CGX-2S-CLM	CGX-2S-CLF
Maximum number of cameras	1	2 <sup>1</sup>	1
Number of CAMLINK™ connectors on the grabber	1	2	2
Number of USB channels	1	2	2
IO configuration	Frame trigger + line trigger + dual output line	Dual frame trigger + dual line trigger	Frame trigger + line trigger + dual output line

## 2.3 ELECTRICAL

Electrical	
Camera interface	Complies with CAMLINK™ specification
External triggers	Comply with RS422 specification
Encoder frequency	10 MHz max.
Control outputs	Comply with RS422 specification <a href="#">Note 1</a>
Power supply	+5V±5% over USB
Power consumption	4.5W maximum, 3.5W typical
ESD protection	15 kV on USB and IO

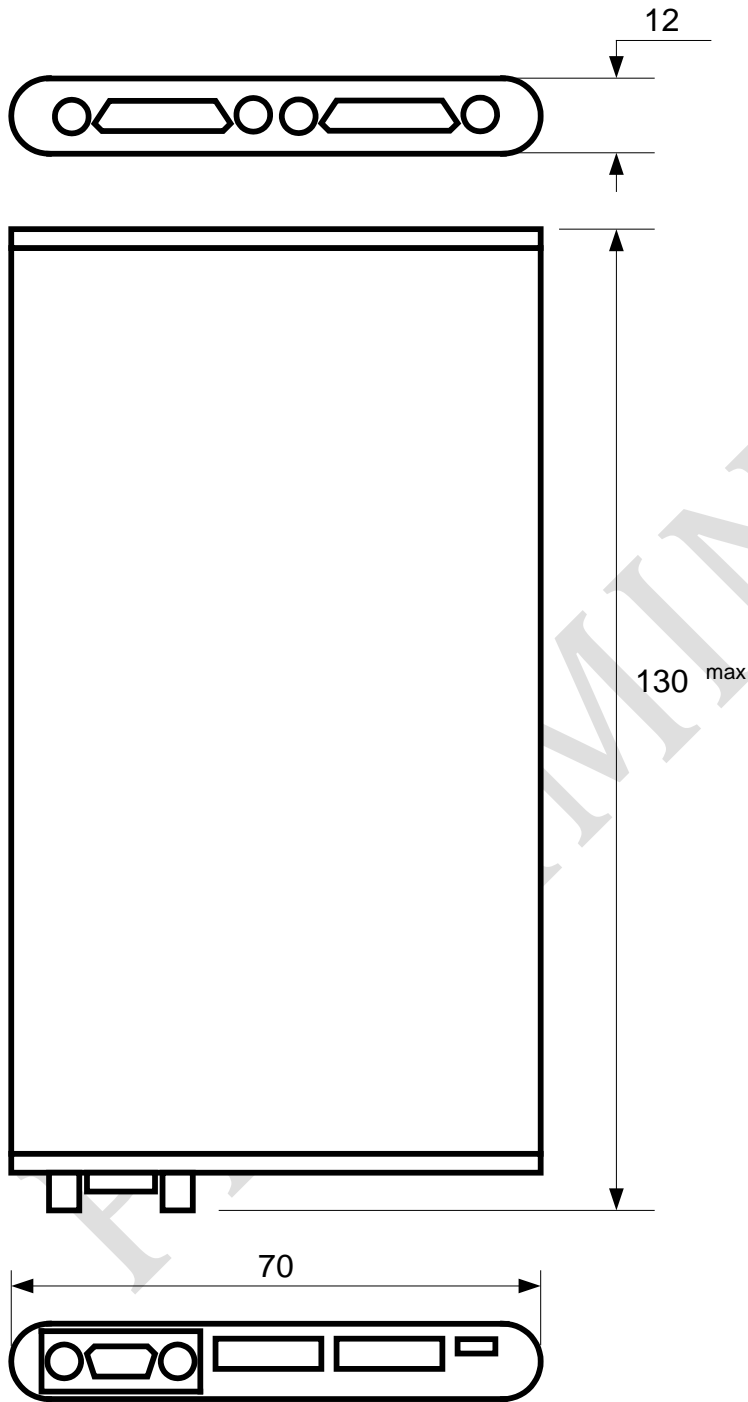
### Notes

1. Not all models support control outputs. See [section 2.2](#) for details

<sup>1</sup> Dual-base configuration only



## 2.4 MECHANICAL



All dimensions are in mm.  
Drawing is not to scale.



### 3. DISCLAIMER

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