



INDUSTRIAL MACHINE VISION CAMERAS



FORGE 5GigE

The Forge is based on an all-new camera platform designed to support a feature and sensor set to easily built robust and powerful systems faster. It offers flexibility link speeds as well as the ability to go beyond 5GigE performance and control data transfer to the host. With OEMs in mind, the Forge provides features for easy integration, a seamless upgrade path from 1GigE systems and supports a choice of SDK's and GigE Vision compliant software packages.

FEATURES

BUILDING RELIABLE AND POWERFUL SYSTEMS, FASTER

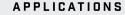
Constructed on an all-new platform, the Forge is designed to offer the richest combination of on-camera pre-processing features, leverage the industry's most advanced sensors, and support the Trigger-to-Image Reliability (T2IR) framework for you to easily build robust systems.

BEYOND 5GIGE PERFORMANCE

In addition to supporting link speeds of 1, 2.5, and 5GigE, the Forge offers burst mode to capture images at speeds up to 10Gb/s into memory. This combined with a 500 MB image buffer allows engineers to control data transfer without overwhelming the host.

EASE OF INTEGRATION

Designed to simplify OEM integration with features including PoE, strong thermal management and opto-isolated triggering for streamlined peripherals & easier camera control. Upgrade current system performance with Forge without changing your application software. Forge supports both Teledyne Spinnaker and Sapera SDKs and GigE Vision compliant software packages.



Electronics Inspection

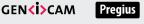
Food Processing

Pharmaceuticals

Sports Analytics

Virtual Reality Motion Capture





SPECS	FG-P5G-50S4 M -C	FG-P5G-50S4C-C	
Resolution	2448 x 2048		
Frame Rate	122 FPS		
Megapixels	5 M P		
Chroma	Mono	Color	
Sensor	Sony IMX547, CMOS, 1/1.8"		
Readout Method	Global shutter		
Pixel Size	2.74 μm		
Lens Mount	C-mount		
ADC	8-bit / 10-bit / 12-bit		
Minimum Frame Rate*	1 FPS		
Gain Range*	0 to 48 dB		
Exposure Range*	6 µs to 30 s		
Acquisition Modes	Continuous, Single Frame, Multi Frame		
Partial Image M odes	Pixel binning, decimation, ROI		
Image Processing	Gamma, lookup table, and sharpness	Gamma, lookup table, saturation, and sharpness	
Sequencer	Up to 8 se	ets using 2 features	
Image Buffer	500 M B		
User Sets	2 user configuration sets for custom camera settings		
Flash M emory	4 MB non-volatile memory		
Opto-isolated I/O	1 input, 1 output		
Non-isolated I/O	1 bi-directional, 1 input		
Auxiliary Output	3.3 V, 120 mA maximum		
Synchronization	IEEE 1588 PTP		
Interface	5GigE PoE		
Power Requirements	Power over Ethernet (PoE), or 12 V nominal (9.5 - 24 V) via GPIO		
Power Consumption	8.5 W maximum PoE / 6.6 W maximum GPIO		
Dimensions / Mass	29 mm x 44 mm x 74 mm / 132 g		
Machine Vision Standard	Gig	GigE Vision v2.0	
Compliance	CE, FCC, KCC, RoHS, REACH. The ECCN for this product is: EAR099.		
Temperature	Operating: 0°C to 50°C Storage: -30°C to 60°C		
Humidity	Operating: 20% to 80% (no condensation) Storage: 30% to 95% (no condensation)		
Warranty		3 years	

*Values are the same in binning and no binning modes.

Teledyne FLIR® Integrated Imaging Solutions Inc.

CANADA

12051 Riverside Way Richmond, BC, Canada V6W 1K7 T: +1 866.765.0827 (toll free) T: +1 604.242.9937 F: +1 604.242.9938 E: mv-sales@teledyneflir.com www.teledyneflir.com/mv

USA

T: +1 866.765.0827 (toll free) E: mv-na-sales@teledyneflir.com

EUROPE T: +49 7141 488817-0 F: +49 7141 488817-99 E: mv-eusales@teledyneflir.com

CHINA

T: +86 10 8215 9938 F: +86 10 8215 9936 E: mv-chinasales@teledyneflir.com

ASIA E: mv-asiasales@teledyneflir.com www.teledyneflir.com

 $\ensuremath{\mathbb{C}}$ 2023 Teledyne $\ensuremath{\mathsf{FLIR}}^{\ensuremath{\oplus}}$ Integrated Imaging Solutions Inc. All rights reserved.

Names and marks appearing on the products herein are either registered trademarks or trademarks of Teledyne FLIR®, Inc. and/or its subsidiaries. Specifications are subject to change without notice.

