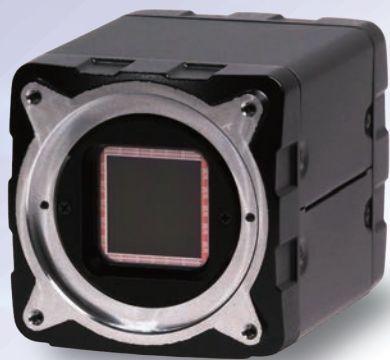# 50Gbps transfer bandwidth provided by CXP-12 Quad

37.7MP to 67MP resolution

CoaXPress 2.0 | EX Series

High-speed Interface High-end Camera

Mounted with e2v global shutter CMOS sensor

Bandwidth 50G

CoaXPress

60×60×80mm | 280g

67 MP · **64.5 fps** · **B/W**
EX670AMG-X

67 MP · **64.5 fps** · **Color** · NEW
EX670AMCG-X

37.7 MP · **120 fps** · **B/W** · NEW
EX370BMG-X

Feature

| 50Gbps transfer bandwidth provided by CoaXPress 2.0 CXP-12 Quad
  - Bandwidth ten times wider than USB 5Gbps (USB3.1 Gen1)
  - Bandwidth seven times wider than the Camera Link Full configuration

| The 37.7Mp to 67Mp resolution and the electronic global shutter make it possible to capture fast moving subjects sharply with minimal motion blur.

| The optional F or M42 mount adapter makes it possible to use various lenses, including those for single-lens reflex cameras.

| Teli Core Technology contributes to the enhancement of the response speed of camera systems.

| The EX Series can be connected to various image processing systems with a flexible and reliable long coaxial cable.

F-mount / M42-mount conversion adapter (Optional)

Specifications

| B/W or COLOR	B/W		COLOR
Pixels	37.7M		67M
Items \ **Model**	EX370BMG-X	EX670AMG-X	EX670AMCG-X
Interface	CoaXPress 2.0		
Imager	CMOS image sensor		
Imager model	EV2S36MB	EV2S67MB	EV2S67MC
Resolution	6,144(H) x 6,144(V)	8,192(H) x 8,192(V)	
Frame rate [*1]	(1)120 fps, (2)42.1 fps, (3)21 fps, (4)10.7 fps	(1)64.5 fps, (2)31.6 fps, (3)15.8 fps, (4)8 fps	
Pixel size	2.5 µm x 2.5 µm		
Scanning area	15.36 mm(H) x 15.36 mm(V)	20.48 mm(H) x 20.48 mm(V)	
Image size	4/3 type	1.8 type (APS-C)	
Aspect ratio	1:1		
Scanning	Progressive		
Electronic shutter method	Global shutter		
Random Trigger Shutter Type	External Trigger / Software Trigger / Link Trigger		
Random Trigger Shutter Mode	Edge / Level / Bulk (255 times)		
Sequential shutter	Max. 16 entry		
Exposure Time	MANUAL : 10 µs to 1 s Random Trigger Shutter : 10 µs to 1 s (Edge or Bulk mode), 200 µs to Trigger width (Level mode)		
Synchronization System	Internal		
Optical glass/filter	Dust-proof glass		
Sensitivity	2,350 lx (F5.6, 1/125 s)	2,500 lx (F8, 1/66.7 s)	2,100 lx (F5.6, 1/66.7 s)
Minimum illuminance [*2]	2 lx	1 lx	2 lx
Gain	MANUAL : 0 to +36 dB		
Black Level	-25% to +25%		
LUT	In 12 bit, Out 12 bit		
Image Output Format	Mono12, Mono10, Mono8		Bayer12, Bayer10, Bayer8
Readout Mode	All pixel, ROI, Binning, Mirroring, Flip		
External trigger input	Low: 0 to 0.5 V, High: 2 to 24.0 V High active / Low active, Pulse width: 200 µs (minimum)		
Power supply	PoCXP / DC+24 V (18.5 V to 26 V) (HIROSE connector)		
Power consumption [*3]	13.6 W	13 W	13.3 W
Lens mount	Mountless (Φ50 H7)		
Mount adapter option	F-mount / M42-mount conversion adapter		
External dimension	60(W) x 60(H) x 80(D) mm (Not including protruding parts)		
Mass	approx. 280g		
Operation temperature	0 ℃~40 ℃ (below 60 ℃ on cabinet surface) [*4]	0 ℃ ~ 40 ℃ (below 60 ℃ on cabinet surface)	
Operation humidity	10% to 90% (no condensation)		
Conformity	CE, FCC, RoHS, WEEE, CoaXPress 2.0, GenICam, IIDC2		

*1 : (1)=CXP-12 Quad, Mono8/Bayer8, (2)=CXP-6 Quad, Mono8/Bayer8, (3)=CXP-12, Mono8/Bayer8, (4)=CXP-6, Mono8/Bayer8
*2 : F1.4, Gain : +36 dB, Video level : 50% *3 : All pixel, CXP-12 Quad output *4 : Below 75 ℃ on Image sensor

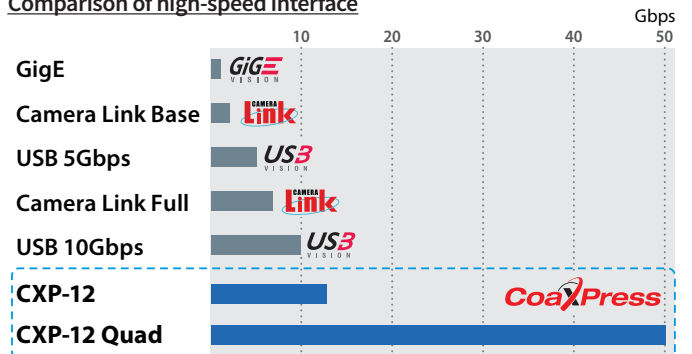# Wider shooting field of view with high resolution of 37.7 MP to 67MP
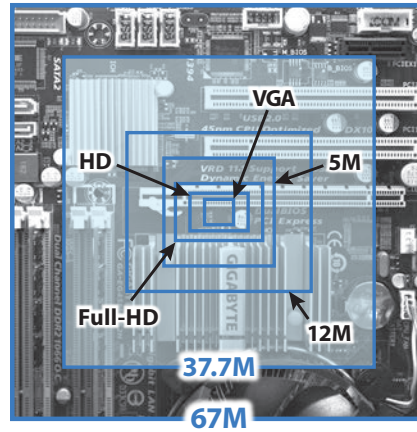
VGA (640×480)
HD (1,280×720)
Full-HD (1,920×1,080)
5M (2,448×2,048)
12.3M (4,096×3,000)
37.7M (6,144×6,144)
67M (8,192×8,192)

* The above image is the result of software simulation.

# 50Gbps transfer bandwidth provided by CoaXPress 2.0 CXP-12 Quad

Comparison of high-speed interface

* These are the data transfer bands of each interface and are different from the video data transfer bands.

TeliCamSDK

- Varieties of functions for easy programming
- Easy to capture image
- GEN<i>CAM available
- Abundant sample code
- Easy to understand manuals
- Unified SDK for USB3, GigE & CXP
- Supports Python library "pytelicam" [*3]
- ImageJ plug-in "ImageJ_TeliPlugin" [*4]
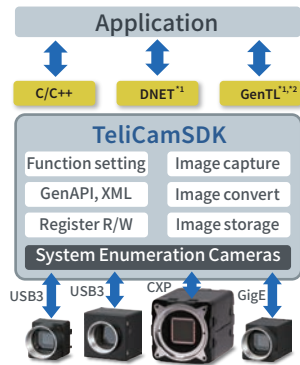
OS / [*5]	Windows		Linux			
Distribution	**10**	**11**	Intel / AMD Ubuntu			**ARM**
			18.04 LTS amd64	**20.04 LTS** amd64	**22.04 LTS** amd64	
Support	✓	✓	✓	✓	✓	✓

TeliCamSDK for Linux supported ARM architectures.   - Jetson nano / Raspberry pi 4 [*6]

*1: for Windows / *2: Supported USB and CXP / *3: Compatible with TeliCamSDK v4.0.1 or later / *4: Compatible with TeliCamSDK v4.0.1.1 or later /
*5: Please contact us for other OS and distributions. / *6: With a GigE camera, image might be missed depending on PC specifications.

Outline drawing
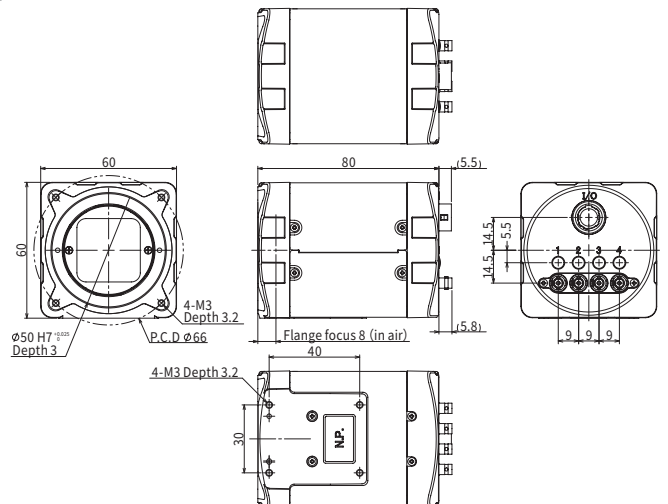
⚠ Notes on Safety

- Before using this product, please read "Operation Manual" carefully in order to use this product safely and correctly.
- If this product should be used in the extraordinary conditions or environments, or if you have any questions or problems, please contact our sales division.

Toshiba Teli Corporation

https://www.toshiba-teli.co.jp/en/

🔍 teli camera

The information of this catalog is current as of November 2023.

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