

GigE Vision compliant, 12megapixels, 6 frame/sec

## PROGRESSIVE SCAN CAMERA

**FCM12MGE** Monochrome  
**FSM12MGE** Color



Lens: optional

### Overview

- The FC (S) M12MPL is a monochrome (color) progressive camera equipped with a high sensitivity and high-resolution CMOS sensor.
- Outputs progressive images in 6 fps, with 12million pixels.
- The noise is reduced by adopting the rolling shutter receiving light at a large area.
- Video signal is output complying with Gigabit Ethernet in progressive scanning (non-interlaced scanning) format.
- By global reset using a strobe light simultaneously, the random shutter (async reset) works like a global shutter mode.

### Features

- Capable of image transmission over 100m without repeater.
- The high-sensitivity CMOS sensor enables the adoption of general purpose C-mount, despite the 12 million high pixels
- Reduced size and weight by original mechanism and electrical circuit design.
- Power can be supplied either camera connector on the back panel or via a LAN cable (PoE).

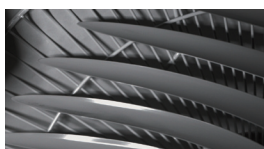
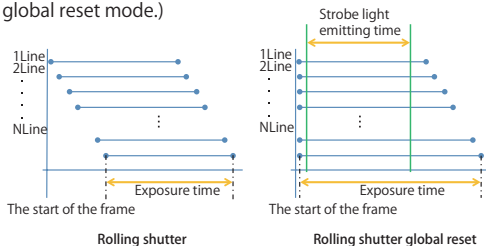
### Applications

- Input device for electronic shutter image processor
- Appearance inspection device
- Monitoring equipment
- Inspection device for electronic packaging
- Inspection equipment for liquid crystal panel
- Data entry device for image processing unit employing computer

### Global reset shutter

By synchronizing with strobe light using the global reset function, the same effect as global shuttering can be obtained.

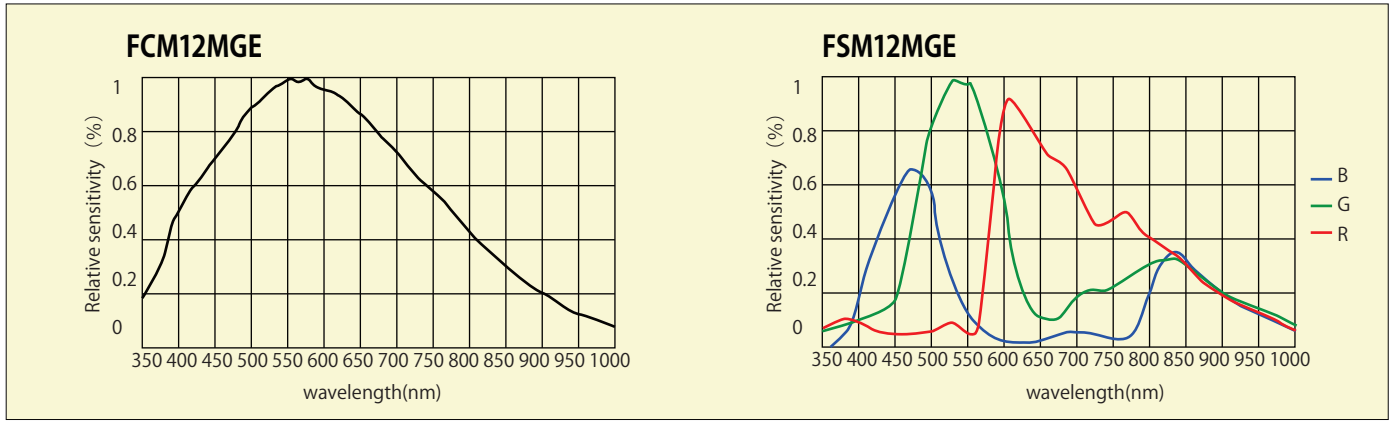
\*Always use strobe lighting for the exposure time in global reset mode. (Compared with the global shutter, it requires a cut-off of the external light in the global reset mode.)



### Specifications

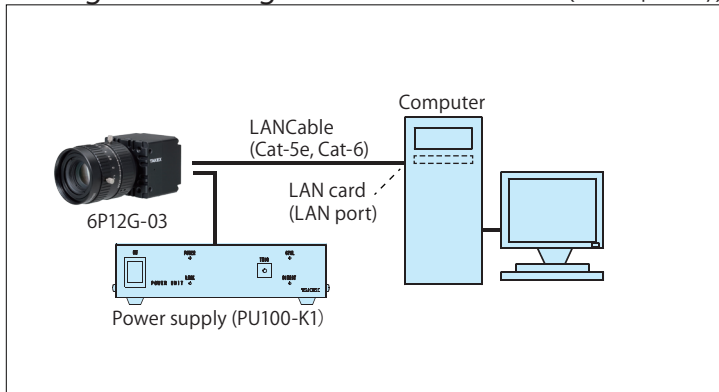
Type	FCM12MGE	FSM12MGE
Image sensor	Monochrome CMOS 1 inch size	Bayer color CMOS 1 inch size
	Progressive scanning / Rolling shutter system Unit cell size 3.1μm×3.1μm	
Number of pixels	4,000(H)×3,000(V)	
Sensitivity	1.4V/lx · sec (on the element)	
Saturation exposure	17.8Ke- (on the element)	
Dynamic range	77.4dB (on the element)	
Video output signal	Progressive scanning : 6 frame/sec. (at 8bit) digital output 8/10/12bit ( Gigabit Ethernet ) GigE Vision compliant	
Built-in function	Global reset	
Lens mount	C mount	
Electronic shutter	100usec ~ 90msec	
Optical filter	None	
Operation ambient temperature	0~40°C (with no condensation)	
Power supply	Via camera connector : DC12V±10% 300mA or less	
	Via PoE : DC42V ~ 57V( 48V STD) 110mA or less IEEE802.3af standard-compliant	
Weight	150g	
External dimension	48(W)×45(H)×51(D) ( connector excluded )	

Spectral Sensitivity



Configuration Diagram

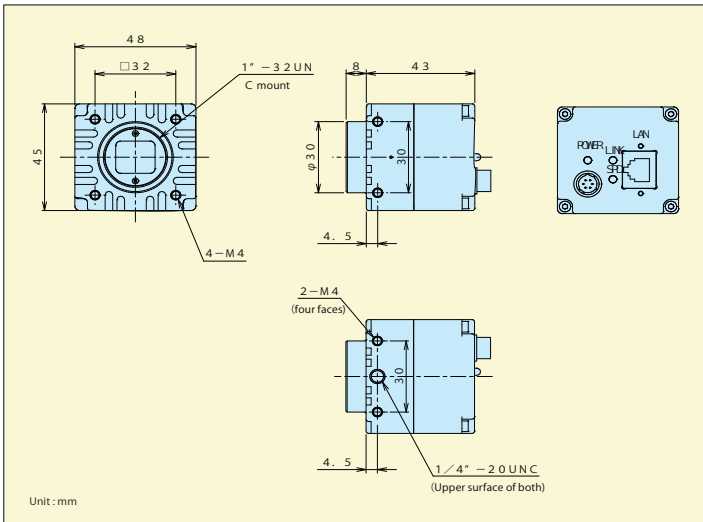
※(Sold separately)



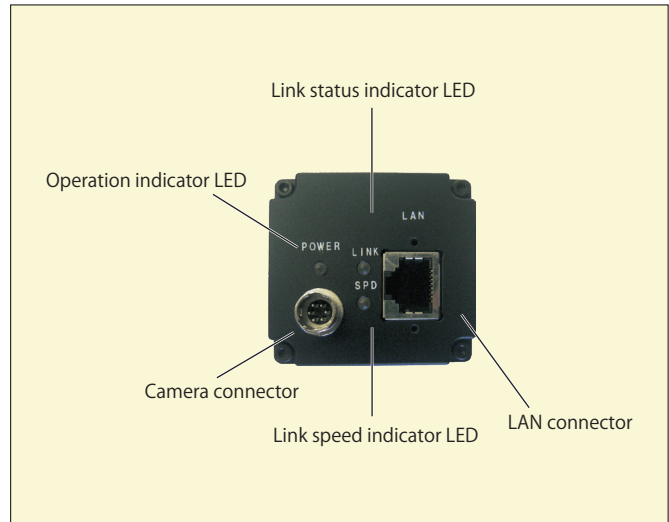
Example of option Items



Dimensional Outline Drawing



Back panel



- It may be changed without a notice about all items (product name, a model, specifications, external form dimensions, materials, the price) explained by this catalogue.
- We do not take responsibility about any accident damage by an error in the use of deficiency in the construction and deficiency of the maintenance check and this product, the natural disaster (surge, including lightning-induced).
- We do not take responsibility about any damage caused by use of this product or disability of this product (such as loss of business profits, business interruption, change or loss of memory contents, the cost involved in the restoration, etc.).
- About this product, our expense will be within the price of this product in any case.



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