

Panasonic®

Machine Vision B/W CCD Camera

GP-MF622

Comes with "Super Reset" functions.

1/2" CCD



MV camera with "Super Reset", lightweight and Ultra-compact unit enables high speed electronic shutter speed of up to 1/96,000-sec for capturing fast-moving objects.

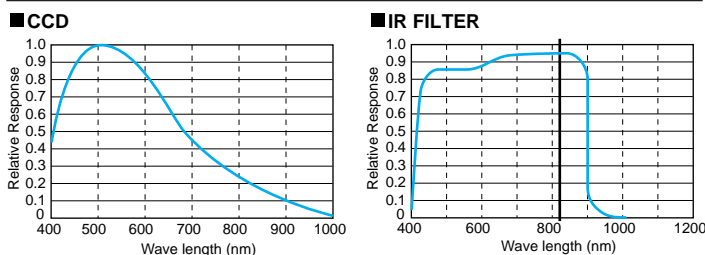
Application

- Any inspection on high speed Production
- FA / Robots
- Image Processing
- SMT / wafer / PCB inspection

Key Features

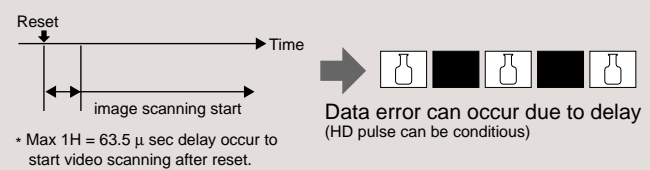
- Newly developed Super-Reset Shutter Trigger functions built in.
- Dimensions: 29 mm (width) x 29 mm (height) x 65 mm (length) (w/o I/O connectors). Ultra-Compact and lightweight.
- Variable electronic shutter speed: 1/60, 1/100, 1/500, 1/1,000, 1/2,000, 1/4,000, 1/8,000, 1/16,000, 1/32,000, 1/64,000, 1/96,000 sec.
- Long lens mount base design that allows wide range of lens selection.
- Equipped two (2) Video output terminals.
- 570 line horizontal resolution.
- Selectable field / frame integration
- 1.0 lx minimum scene illumination at F1.4.
- 56 dB signal-to-noise ratio.
- C-mount
- Removable IR-cut filter.
- Designed to withstand strong Vibration / Shock resistant.

Spectral Response

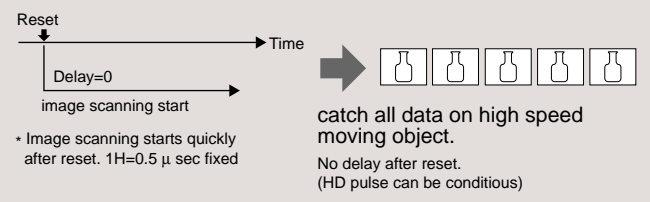


Super-Reset Shutter Trigger Functions

Current



Super-Reset




The shutter speed can be set as below

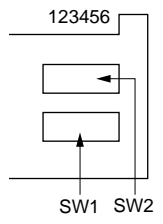
Switch 1				Shutter Speed	Latch	
2	3	4	5		off	on
off	off	off	off	off	1/2,000	1/2,000
on	off	off	off	1/100	1/2,000	1/2,000
off	on	off	off	1/500	1/2,000	1/2,000
on	on	off	off	1/1,000	1/2,000	1/2,000
off	off	on	off	1/2,000	1/2,000	1/2,000
on	off	on	off	1/4,000	1/4,000	1/4,000
off	on	on	off	1/8,000	1/8,000	1/10,000
on	on	on	off	1/16,000	1/16,000	1/30,000
off	off	off	on	1/32,000	1/32,000	1/30,000
on	off	off	on	1/64,000	1/64,000	1/30,000
off	on	off	on	1/96,000	1/96,000	1/30,000
Other Combinations				Not Specified	Not Specified	Not Specified

MAJOR OPERATING CONTROLS AND THEIR FUNCTIONS

Right Side View
Actual size




Left Side View



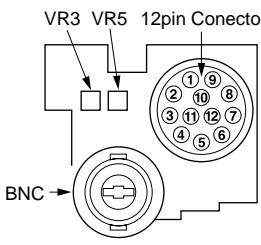
SW1
1: Field / Frame
2: Electronic shutter D0
3: Electronic shutter D1
4: Electronic shutter D2
5: Electronic shutter D3
6: Not used

SW2
1: Synchronization 1
2: Synchronization 2
3: Vrst Latch OFF/ON
4: Vcont DC OFF/ON
5: HD 75Ω OFF/ON
6: VD 75Ω OFF/ON

Rear View
Actual size



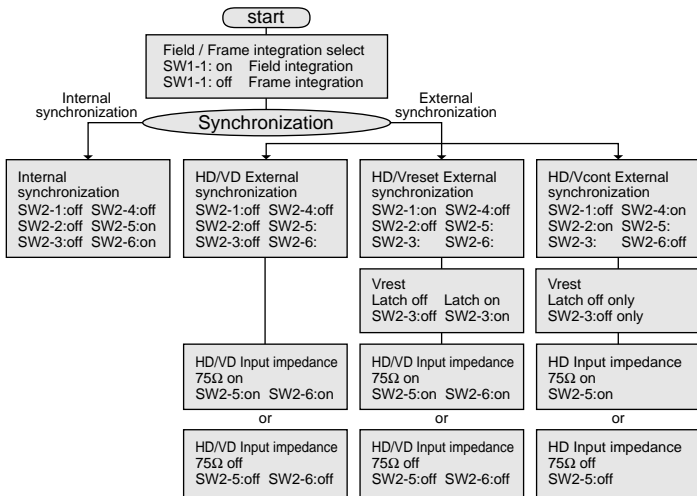
Rear View



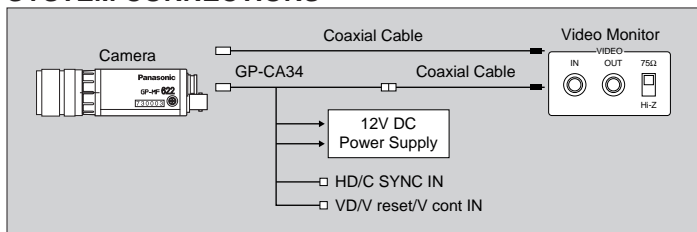
VR3: Pedestal Control
VR5: Manual Gain Control
BNC Connector: Video out 2
Camera Connector (12-pin)
HR10A10R12PB

Pin No.	Description
1	Ground
2	+12V IN
3	Ground for Video Out
4	Video Out
5	Ground for HD
6	HD/C SYNC IN
7	VD/V reset/V cont IN
8	Ground
9	No connection
10	No connection
11	No connection
12	Ground for VD

FUNCTION SWITCH SPECIFICATION



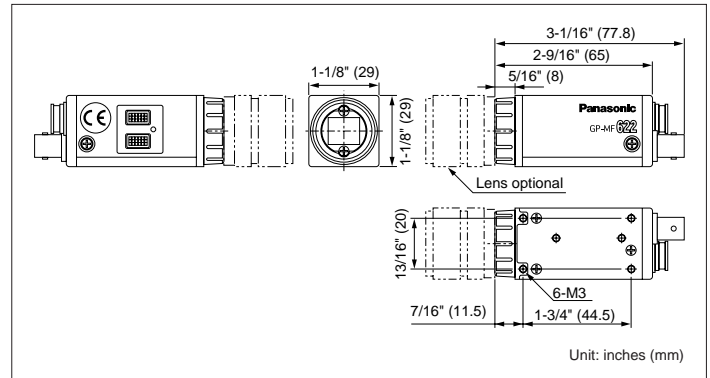
SYSTEM CONNECTIONS



OPTIONAL ACCESSORIES



APPEARANCE



SPECIFICATIONS

Pick-up Device	Interline Transfer type CCD with 768 (H) x 494 (V) pixels.
Image Size	1/2" (7.95 (H) x 6.45 (V) mm) 2 : 1 interlace 1-line interface (Frame accumulation) 2 : 1 interlace 2-line interface (Field accumulation)
Synchronization	Internal or External (Selectable Automatically) Internal : Built-in sync generator External : 4.0 V[p-p]/75 ohms Horizontal drive and Vertical drive pulses for 2 : 1 interlace
External Reset	External signal (4.0 V[p-p]/75 ohms, negative) supplied to EXT VD IN connector can be used as reset signal
Horizontal Resolution	570 lines at center
Minimum Illumination	1.0 lx (0.1 foot-candles), (F1.4, Manual Gain Max (+6 dB), 2 : 1 interlace, without shutter)
Signal to Noise Ratio	56 dB Typical (Manual Gain Off (0 dB), 2 : 1 interlace without shutter)
Gamma	1.0
Gain Selection	0 - 6 dB, (Adjustable by Manual Gain Control on rear panel)
Electronic Shutter	10-step (1/100 s to 1/96 000 s) at normal 7-step (1/2 000 s to 1/96 000 s) at Shutter Trigger Mode (Latch Off) 4-step (1/2 000 s to 1/30 000 s) at Shutter Trigger Mode (Latch On)
Lens Mount	C-Mount
Vibration Resistance	10 G (10 Hz - 150 Hz) (2 hours each for three axes)
Shock Resistance	80 G (IEC 68) *IEC=International Electrotechnical Technical Commission
Power Source	DC + 12 V, 170 mA
Ambient Temperature	-10°C - +50°C (14°F - 122°F)
Dimensions	29 (W) x 29 (H) x 65 (D) mm [1-1/8" (W) x 1-1/8" (H) x 2-9/16" (D)]
Weight	86 g (0.19 lbs.) (Camera Only)

• Weights and dimensions are approximate. • Specifications are subject to change without notice. • These products may be subject to export control regulations.

Panasonic

Medical & Industrial Video Company

A Division of Panasonic Broadcast & Television Systems Company
A Unit of Matsushita Electric Corporation of America

Executive Office: 50 Meddowlands Pkwy 4D-4, Secaucus, New Jersey 07094 (201) 392-6674

PANASONIC CANADA INC.

5770 Ambler Drive, Mississauga, Ontario, L4W 2T3 Canada (905) 624-5010

PANASONIC SALES COMPANY

DIVISION OF MATSUSHITA ELECTRIC OF PUERTO RICO, INC.

San Gabriel Industrial Park 65th Infantry Ave. KM. 9.5 Carolina, P.R. 00630 (809) 750-4300

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