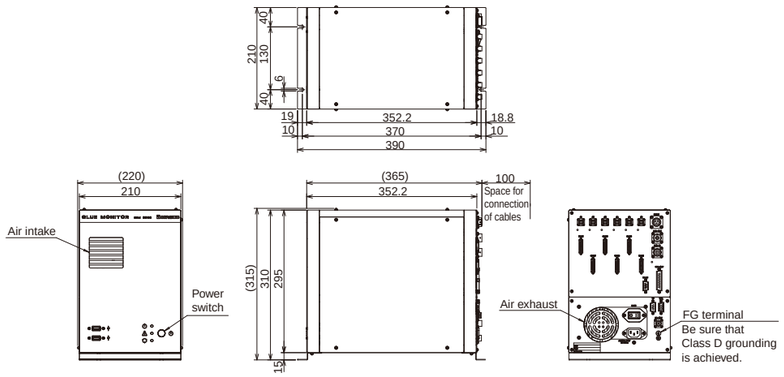
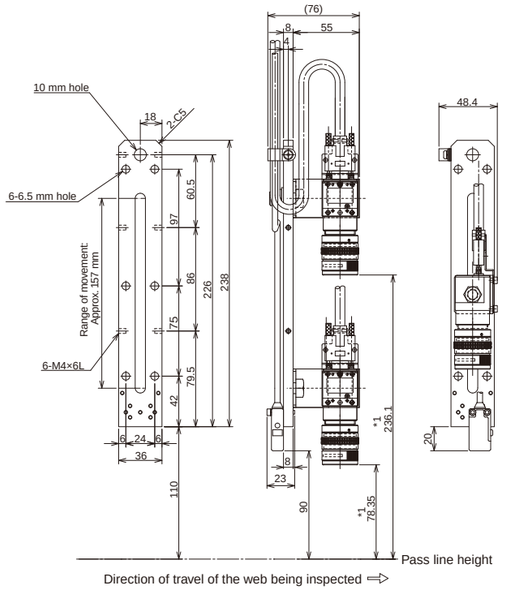
External dimensions

GM6600/A Controller (units: mm)



GM6600/A Camera Unit



CCD camera:
WM0001010-JA: Nireco

Lens : Select according to specifications
C1614A: Pentax (Focal length = 16 mm)
B2514D: Pentax (Focal length = 25 mm)

Close-up ring: Select according to specifications
EX-T0.5MM: Pentax (Ring thickness = 0.5 mm)
EX-T1.0MM: Pentax (Ring thickness = 1.0 mm)

Camera cable: Select according to specifications
CL-S-MS-P-050: Oki Electric Cable (Cable length = 5.0 m)
CL-S-MS-P-100: Oki Electric Cable (Cable length = 10 m)

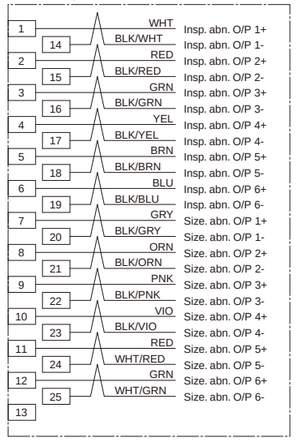
Camera bracket assy:
MK0000780-JA

Photoelectric sensor:
PZ-101: Keyence
Detection range: 20 – 100 mm

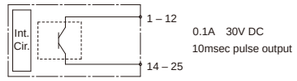
Note: "*1" is the dimension when the lens is the C1614A and there is no close-up ring.

Wiring diagram

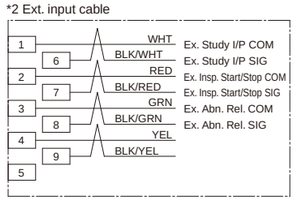
*1 Error output cable



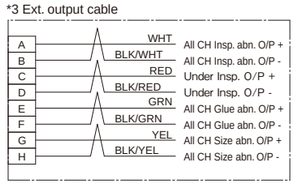
*1 Error output



*2 Ext. input cable



*3 Ext. output cable



*3 Extended output

NIRECO CORPORATION

●**Hachioji Office**
2951-4, Ishikawa-machi, Hachioji, Tokyo, 192-8552, Japan
Telephone : +81-42-660-7409 Facsimile : +81-42-645-7737

●**Osaka Office**
4-8-6 Minamisenba, Chuo-ku, Osaka, 542-0081, Japan
Telephone : +81-6-6243-2461 Facsimile : +81-6-6243-2466

Website : www.nireco.com E-mail: world@nireco.co.jp

● For further information, contact:

QI0332.3-E 1510TP05

Printed in Japan

Glue Monitor System GM6600/A

Inspect defects of gluing and prevent flow of a faulty product.

Glue Monitor System GM6600/A

(camera, touch monitor system)

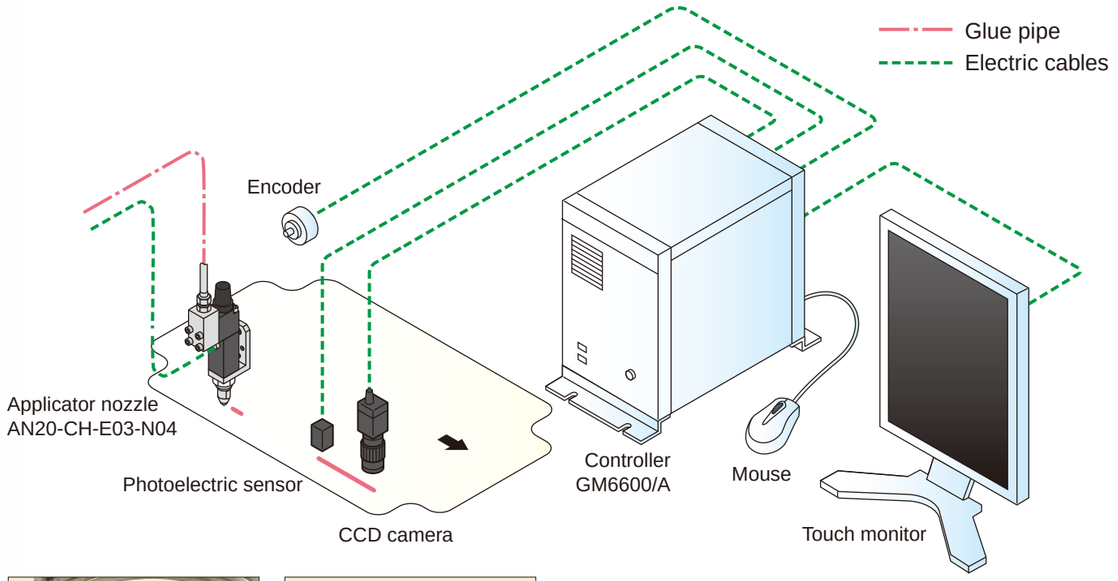
The Glue Monitor GM6600/A uses images taken by a camera to check the length, position and other defects of gluing. If these measurements deviate from the programmed values, the GM6600 can display an image of the gluing at that moment on the monitor screen, and send an output signal to sound a buzzer and activate a warning light to notify the operator, and stop the machine.

Features

- Can monitor signals from up to 6 channels.
- Applicable to both hot-melt and cold-gluing systems.
- Not affected by glue viscosity or color.
- The state of the gluing can be constantly observed via the monitor.
- Saves an image of the gluing condition when an it defects a defect.
- Has a product code discrimination function and can tell when different products have been added to the line.
- The system can inspect multiple gluing patterns close together with a single camera.
- The system “learns” the glue inspection pattern, no which enable to save a trouble some work.
- Can check whether flaps have been properly folded or not.
- Scan areas can be set in up to 4 locations per channel, to check the glue and flap conditions.
- The system detects the front edge of the sheet, and scan areas follow the edge until the scan is completed.

Inspection screen

System diagram



GM6600/A camera unit

LED lighting system

- These are the inspection camera unit and LED lighting system used with the Glue Monitor GM6600/A.
- The LED lighting system is specifically designed for Glue Monitor System.
  The lighting system uses LEDs, making it compact and long-lasting. You can freely adjust the angle of the light and easily position it for the best job.

Model table

MODEL GM6600/A – 1 – 2 – D – 4 – E

	Meaning	Name
1	1 channel	Controller *1
2	2 channels	
3	3 channels	
4	4 channels	
5	5 channels	
6	6 channels	
1～	No. of cameras (1 to 6)	CCD camera(s)
D	Dicplay Monitor	Monitor
T	Touch Monitor	
1～	No. of sensors (1 to 6)	Photoelectric sensor(s)
E	Yes	Encoder

*1: The controller has a control pad.

Specifications

Power supply	100 to 240 V AC, 50/60 Hz, 5 A
Input	CCD camera (1 camera / 1 ch; max. 6 cameras / 6 ch) Photoelectric sensor (At least 1; max. 6) Encoder: 1,200 p/rev (Resolution: 0.25 mm/p)
Output	Error contact: 125 V AC/0.5 A (for channels)
Detection length	10 to 999 mm
Maximum line speed	300 m/min. or less
Materials inspected	Paperboard, poly-laminated paper, cardboard, various kinds of printing paper (provided that there is no printing on the side that is glued)
Mass	10 kg (excluding the monitor)
External dimensions	220 (W) x 315 (H) x 390 (D) mm

Note) The maximum line speed is limited by various conditions.

Maximum number of camera connection (Example view and line speed)

View	Line speed (m/min)																										
	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
40mm	5	4	3	2	2	1																			
50mm	6	5	4	3	3	2	2	2	1																
60mm	6	6	5	5	4	3	3	3	2	2	2	1													
70mm	6	6	6	6	5	4	4	3	3	3	2	2	2	2	1										
80mm	6	6	6	6	6	5	5	4	4	3	3	3	2	2	2	2	1	1							
90mm	6	6	6	6	6	6	5	5	4	4	3	3	3	3	2	2	2	2	2	1	1				
100mm	6	6	6	6	6	6	6	6	5	5	4	4	3	3	3	3	2	2	2	2	2	2	1	1	
120mm	6	6	6	6	6	6	6	6	6	6	5	5	5	4	4	4	3	3	3	3	3	2	2	2	2
140mm	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	5	4	4	4	4	3	3	3	3	3
160mm	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	5	4	4	4	4	3	3

Unit : Maximum number of camera connection.