Automation for a Changing World

Delta Machine Vision System
DMV Series

DELTA

Smarter. Greener. Together.

Delta Machine Vision System DMV Series

High Speed, High Precision, Smart and User-Friendly

The Delta Machine Vision System DMV Series is suitable for various automatic inspections on equipment or production lines, such as quality inspection, positioning guidance, identification, dimension measurement and others. As one of the best systems to facilitate smart manufacturing, Delta's DMV Series covers:

- **DMV1000:** Features a user-friendly interface and requires no complicated settings. With built-in flash timer output control and a simultaneous dual-camera operation function, the DMV1000 greatly reduces the hardware development cost of vision detection systems.

  The DMV1000 Series can quickly upload inspection data to PLCs and other host controllers via Ethernet, serial industrial network communication and I/O output, achieving quick integration with various automation systems.

- **DMV2000:** Matches with high-speed CameraLink cameras and various communication protocols, and can be rapidly integrated with external equipment. The DMV2000 supports multi-task inspection with up to four cameras to enhance efficiency and save development cost. As to program editing, the DMV2000 allows users to self-define the operation mode display / interface and offline mode functions to improve the utilization rate and flexibility.

- **DMV3000G:** Provides smart and user-friendly operation interface and adopts GigE cameras to achieve higher transmission speed. The DMV3000G retains the outstanding features of the DMV1000 and DMV2000, and provides a better user experience in different applications.
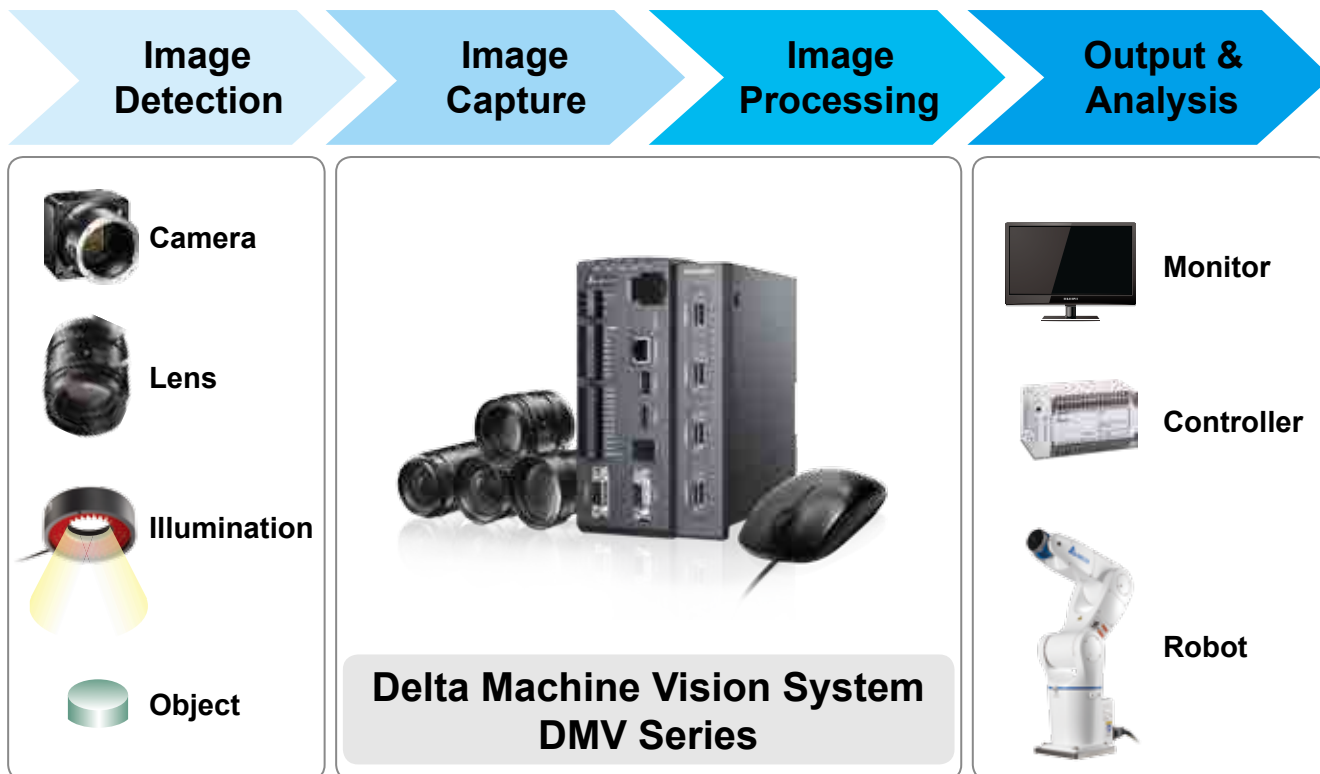
With its advanced vision inspection tools, the DMV Series enhances overall automation production efficiency and product quality for various industries, including machinery, automotive, rubber and plastics, pharmaceuticals, food & beverage, printing, packaging, metal processing, robotic arm integration applications, TFT, semiconductor, solar energy and other electronics industries.

Index

System Configuration

Image Detection	Image Capture	Image Processing	Output & Analysis

Image Detection
- Camera
- Lens
- Illumination
- Object

Image Capture / Image Processing

Delta Machine Vision System
DMV Series

Output & Analysis
- Monitor
- Controller
- Robot

Major Applications of Machine Vision Systems

Quality Inspection
Object and defect inspection

Positioning & Guidance
Cross center positioning,
edge positioning, guidance

Measurement & Counting
Dimension measurement,
package / product counting
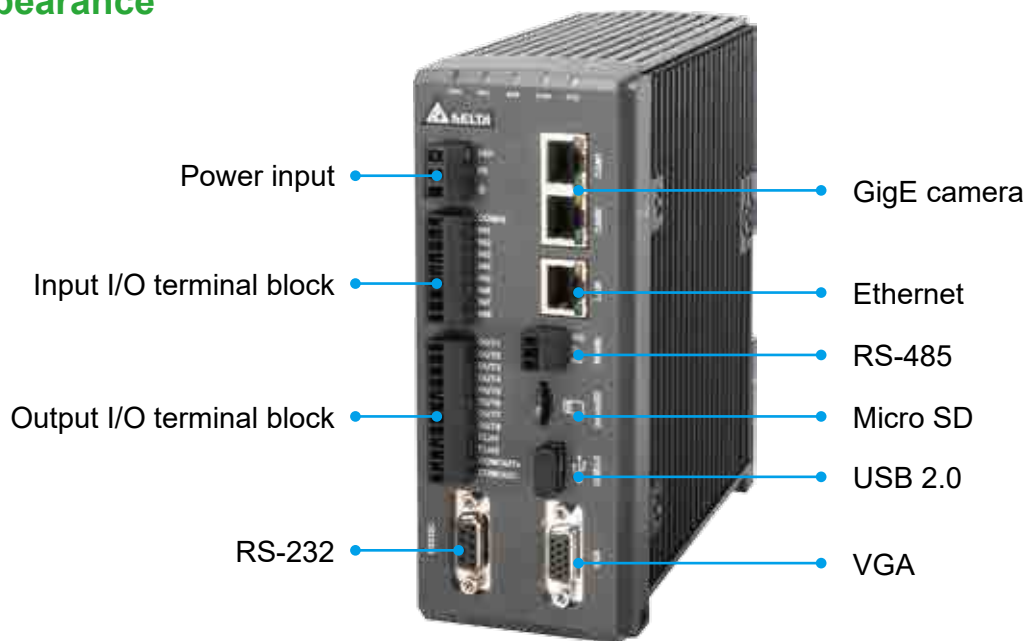
Identification
1D / 2D barcode and character
identification

3

Features - DMV3000G

Supports max. 2 color / Mono GigE high speed color cameras for inspection, and transmits / outputs inspection data to other devices via Ethernet, R-232 / 485, and I/O

- Supports 2 color / monochrome GigE industrial cameras for simultaneous multi-task detection
- Smart and easy setup allows quick inspection project building
- Enhanced inspection speed to increase production efficiency and save cost
- Multiple built-in image inspection tools, saving program development and editing time

Appearance

Power input
Input I/O terminal block
Output I/O terminal block
RS-232

GigE camera
Ethernet
RS-485
Micro SD
USB 2.0
VGA

Camera Specifications

Resolution	Level	Frame Rate	Pixel Dimensions (Horizontal x Vertical)	Sensor Size (mm) (Horizontal x Vertical)	Pixel Size (µm)	Lens Mount
0.3 M	Mono / Color	180 fps	640×480	1/3.6" (3×2.3)	4.8	C mount
2 M	Mono / Color	50 fps	1600×1200	1/1.8" (7.5×5.6)	4.7	C mount

Applications

Inspection for mobile phone lens quality, disposable coffee filters, and others on automation production lines in logistics, food and beverage packaging, electronics, printing industries and more
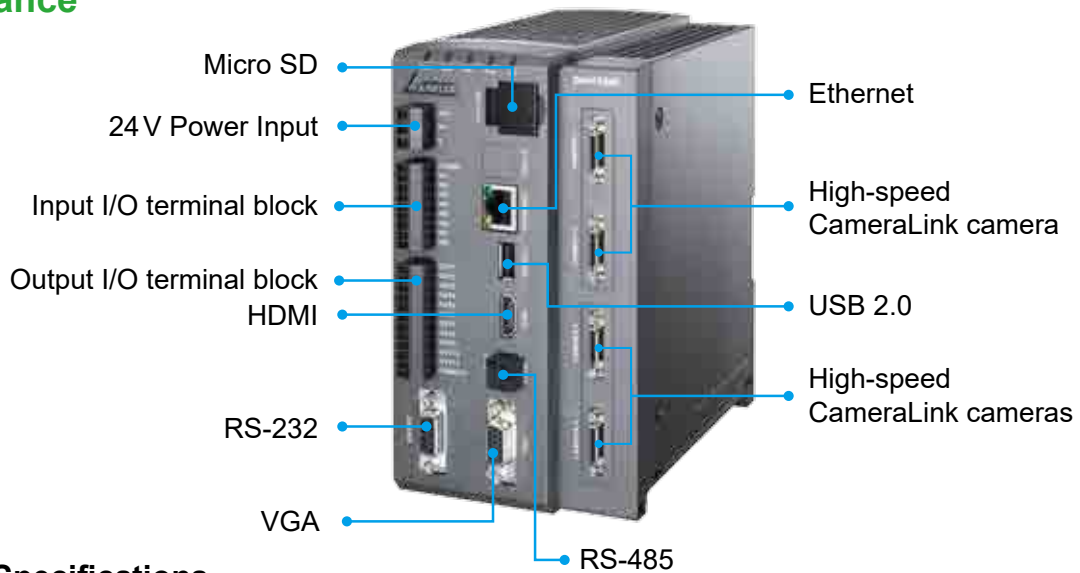
Δ NELTA

Features - DMV2000

Supports max. 4 color / greyscale CameraLink cameras for high-speed inspection tasks

- Improves efficiency and saves development cost: Simultaneous multi-task inspection with 4 cameras
- Reduces development and setup time: Smart operation process, user-friendly interface, multi-function vision development tools, PLC communication function for automatic data exchange
- Flexible configuration: Self-defined operation interface and display
- Multiple communication protocols: Quick connection with external devices
- Fast, stable image capture and transmission: Supports 0.3 M ~ 1.2 M pixels color / monochrome CameraLink cameras for high-speed image capturing

Appearance

Micro SD
24 V Power Input
Input I/O terminal block
Output I/O terminal block
HDMI
RS-232
VGA
RS-485
Ethernet
High-speed CameraLink camera
USB 2.0
High-speed CameraLink cameras

Camera Specifications

Resolution	Level	Frame Rate	Pixel Dimensions (Horizontal x Vertical)	Sensor Size (mm) (Horizontal x Vertical)	Pixel Size (µm)	Lens Mount
0.3 M	Mono / Color	432 fps	642×484	1/3" (4.8×3.6)	7.4	C mount
2 M	Mono / Color	333 fps	2048×1088	2/3" (11.26×5.98)	5.5	C mount
4 M	Mono / Color	180 fps	2048×2048	1" (11.26×11.26)	5.5	C mount
5 M	Mono / Color	35 fps	2448×2058	2/3" (8.4×7.0)	3.45	C mount
12 M	Mono / Color	62 fps	4096×3072	1.76" (22.5×16.9)	5.5	F mount

Applications

Automation production lines, industrial robots, vision guided robotic system (VGRS) and more in food and beverage packaging, electronics, printing and pharmaceutical industries
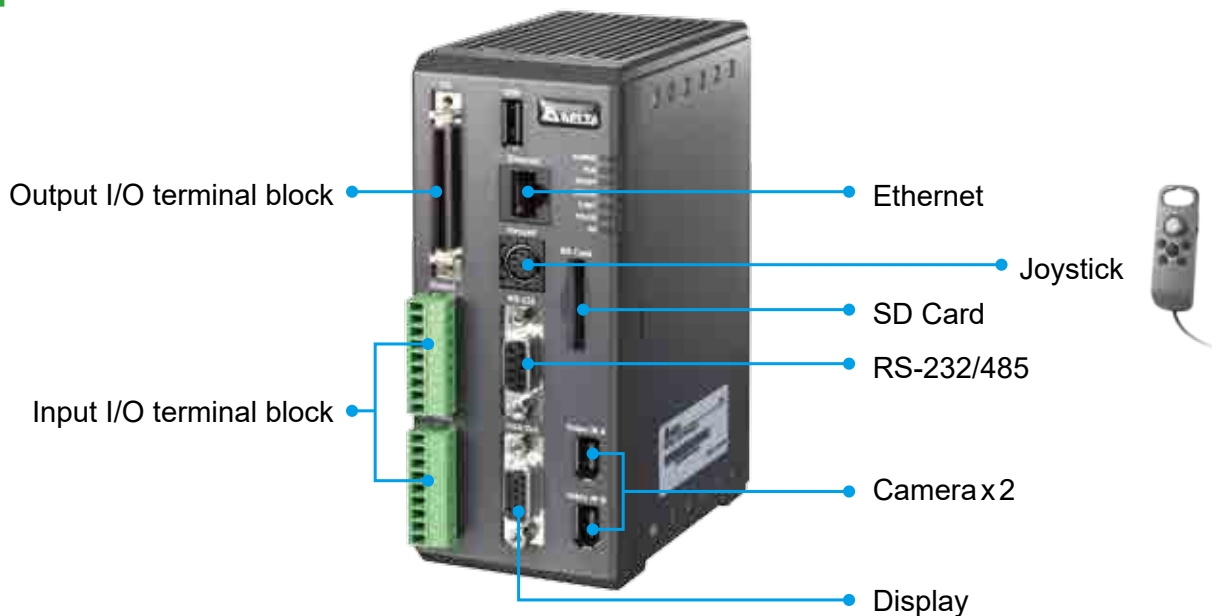
Features - DMV1000

Basic machine vision system that supports max. 2 IEEE1394 Mono cameras

- Programs, parameters, inspection images and results recorded and stored in SD cards
- Easy settings and operation with a joystick
- Provides a variety of digital I/O connections, a 9-pin input cord end terminal, a 9-pin output interface terminal, and a 50-pin input/output terminal
- Built-in vision inspection function development tools, no need for complex program editing
- Higher system reliability, better than PC-Based systems
- Compact design saves installation space

Appearance

Output I/O terminal block

Input I/O terminal block

Ethernet

Joystick

SD Card

RS-232/485

Camera x 2

Display

Camera Specifications

Resolution	Level	Frame Rate	Pixel Dimensions (Horizontal x Vertical)	Sensor Size (mm) (Horizontal x Vertical)	Pixel Size (µm)	Lens Mount
0.3 M	Mono	80 fps	640×480	1/3"(4.8×3.6)	7.4	C mount
0.8 M	Mono	30 fps	1024×768	1/3"(4.8×3.6)	4.65	C mount

Applications

Automation production lines, industrial robots, vision guided robotic system (VGRS) and more in food and beverage packaging, electronics, printing and pharmaceutical industries
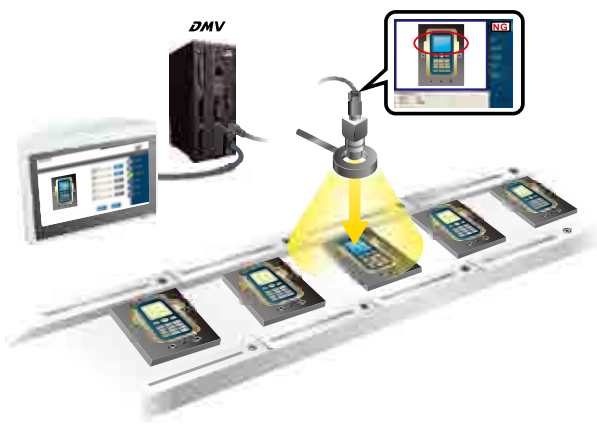
Applications
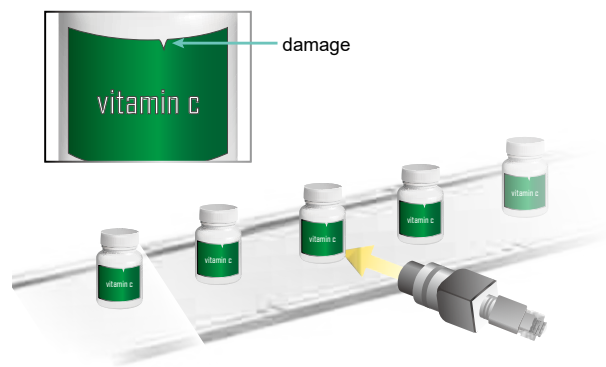
01 Quality Control

Object and Defect Inspection

Object Inspection

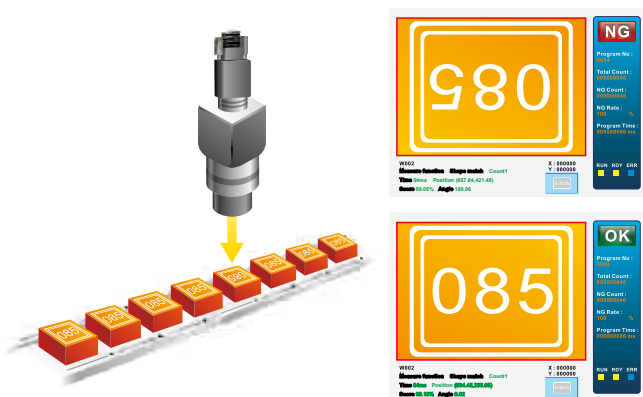Inspects product appearance such as buttons and touchscreens

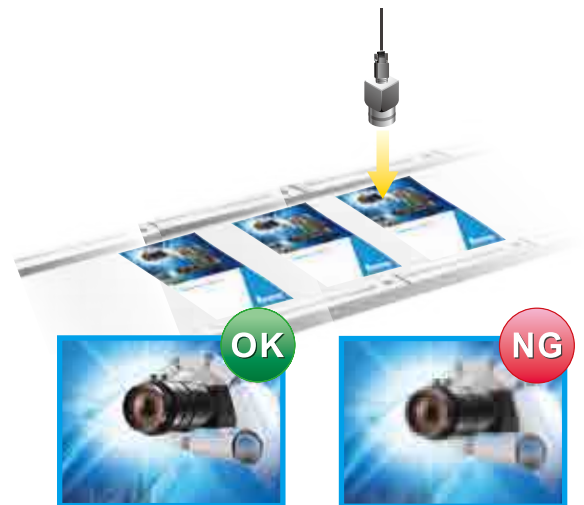### Label Inspection

Inspects stains or damage on labels

Direction Identification

Inspects the direction of workpieces conveyed on a production line

Printing Quality Inspection

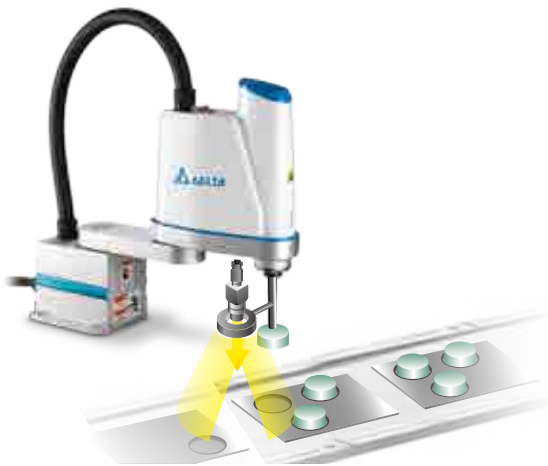Inspects pictures or graphs printed on paper or workpieces to ensure quality

02 Positioning & Guidance

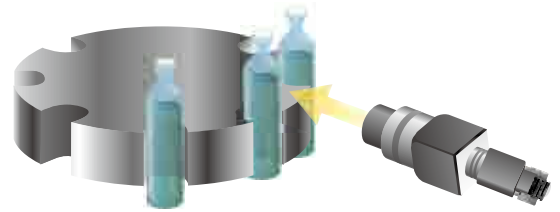## Cross Center Positioning, Edge Positioning, Guidance

Vision Guidance for Robotic Pick-and-Place

Vision guidance for industrial robots to precisely perform workpiece pick-and-place
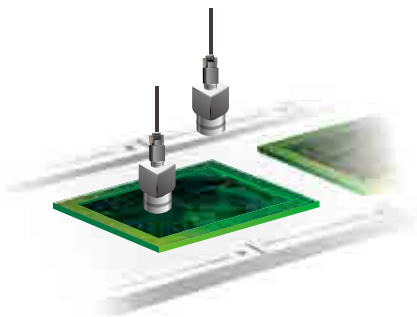

Beverage Packing Inspection

Inspects the liquid level of each bottle

Defect Detection

Automatic positioning of PCBs and TFT boards
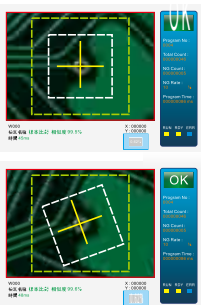
Bottle Cap Position Identification

Identifies the bottle capping position
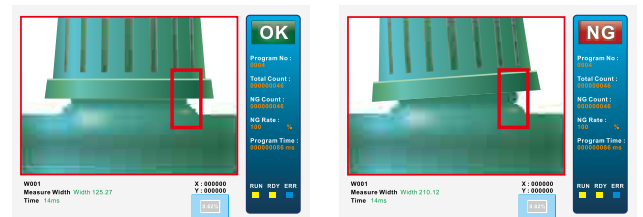
Applications

03 Measurement & Counting

Object Counting
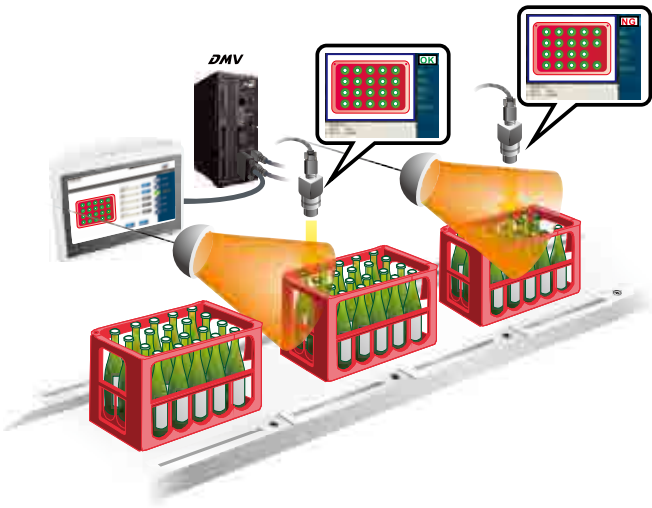
Dimensions Measurement
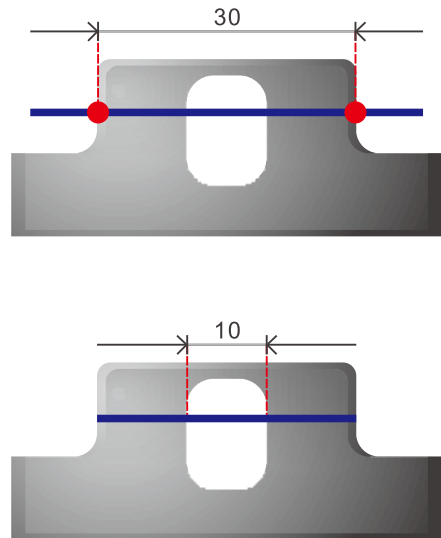
Bearing Ball Counting
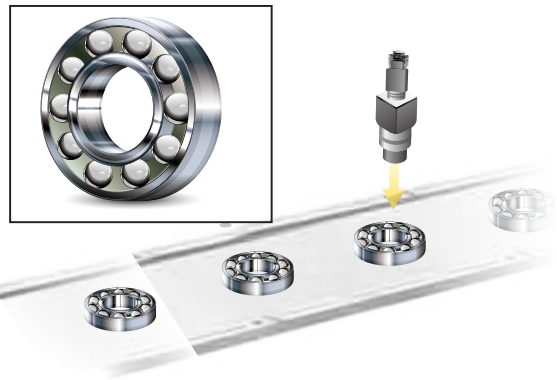
Pin Number Counting

OK

Program No : 0004

Total Count : 000000046

NG Count : 000000003

NG Rate : 6 %

Program Time : 000000086 ms

RUN RDY ERR

W000

Measure function Edge Count Count 1

Time 12ms

X : 000000
Y : 000000

0.62%

04 Identification

Optical Character Verification (OCV)

Production / Expiration Date Inspection

EXP. 2018.12.21

Barcodes Identification

9031 1017

Material Printing Correctness Identification

TICKET ID: 123456789
ADDRESS: YOUR CITY

VIP
EVENT NAME
TICKET ID: 123456789
ADDRESS: YOUR CITY
536275

Specifications

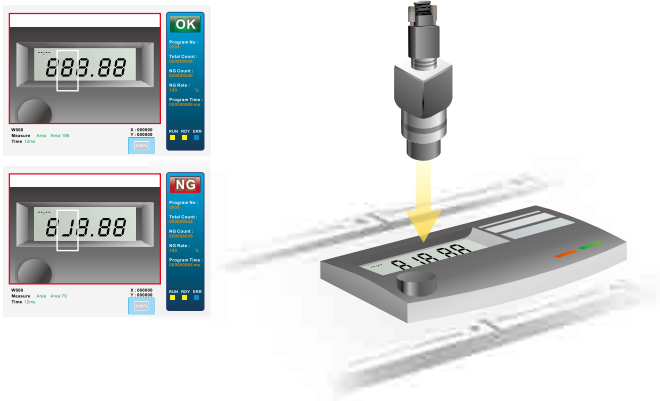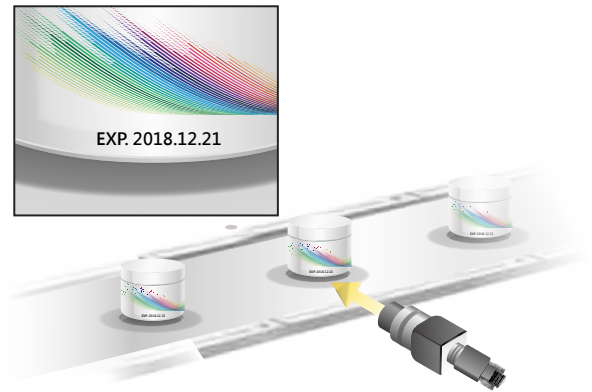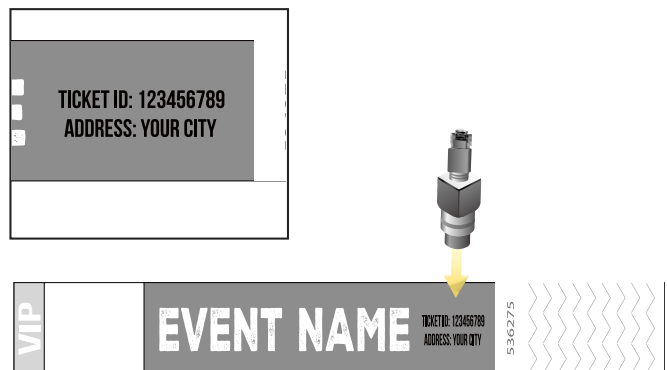| Specifications	DMV3000G	DMV2000	DMV1000
Controllers			
Power Supply	$24\,V_{DC}$	$24\,V_{DC}$	$24\,V_{DC}$
Operation Voltage Range	Rated Voltage 90%~110%	Rated Voltage 90 %~110 %	Rated Voltage 90 %~110 %
Current Consumption	2 camera: below 2.5 A	4 cameras: below 4 A 2 camera: below 3.4 A	2 cameras: below 1A

Vibration Resistance	5~8.4 Hz/3.5 mm and 8.5~150 Hz/1 G for 1 hr; XYZ axes	• No error:
		  XYZ axes/10~55 Hz/
		  $10\,m/s^2$ (1.0 G) for 10 mins
		• No damage:
		  XYZ axes/10~55 Hz/
		  $20\,m/s^2$ (2.0 G) for 2 hrs
			10~55 Hz 10 m/s for 10 mins; XYZ axes

Shock Resistance	Max. 15 G
	XYZ axes/6 directions,
	3 times each
		• No error: $200\,m/s^2$ (20 G),
		  6-surface/3-edge/1-corner,
		  3 drops each
		• No damage: $300\,m/s^2$ (30 G),
		  6-surface/3-edge/1-corner,
		  3 drops each
			Max. 300 m/s
			XYZ axes/6 directions,
			3 times each

Operating Ambient Temperature	-10 °C~50 °C	0 °C~45 °C	0 °C~50 °C
Storage Temperature	-30 °C~85 °C	-20 °C~65 °C	-20 °C~65 °C
Operating Relative Humidity	35%~65% RH (non-condensing)	35%~85% RH (with no icing or condensation)	35%~65% RH (non-condensing)
Altitude	Under 2000 m	Under 2000 m	Under 2000 m
Cameras			
Type	Digital color/Mono GigE camera	Digital color/greyscale CameraLink camera	IEEE 1394a digital greyscale camera

Resolution	• 0.3 M: 640 (H)x 480 (V),
	  Base: 120 fps
	• 2 M: 1600 (H)x 1200 (V),
	  Base: 50 fps
		• 0.3 M: 640 (H)x 484 (V),
		  Base: 480 fps
		• 2 M: 2048 (H)x 1088 (V),
		  Base: 74 fps, Full: 295 fps
		• 4 M: 2048 (H)x 2048 (V),
		  Base: 40 fps, Full: 159 fps
		• 5 M: 2448 (H)x 2048 (V),
		  Base: 32 fps, Full: 35 fps
		• 12 M: 4096 (H)x 3072 (V),
		  Base: 13 fps, Full: 50 fps
			• 0.3 M: 640 (H)x 480 (V),
			  Base: 80 fps
			• 0.8 M:1024 (H) x 768 (V),
			  Base: 30 fps

Shutter Speed	17 µs~1.8 s	25 µs~16.7 s	0.05 ms~1 s or user-defined (16 kinds of speeds)
Lens Mount	C mount	C mount/F mount	C mount
Operation Environment Temperature	0 °C~45 °C	0 °C~45 °C	0 °C~45 °C
Storage Environment Temperature	-20 °C~85 °C	-20 °C~65 °C	-30 °C~60 °C
Weight	Approx. 50 g	Approx. 140 g	Approx. 58 g

Specifications	DMV3000G	DMV2000	DMV1000
Functions			
Number of Cameras Connectable	Max. 2	DMV2000-CL4-HS: Max. 4 DMV2000-CL2-HS: Max. 2	Max. 2
Number of Projects	• Internal memory: capacity varies according to projects / up to 1,000 • Memory card: capacity varies according to projects / up to 9,999 • Supports changeover by I/O and communication (RS-232, RS-485, Ethernet)	• Internal memory: Approx. 6,000 projects • SD card: no capacity limit • Supports changeover by I/O and communication (RS-232, RS-485, Ethernet)	• 32 projects in internal memory • 68 projects in SD Card • Supports changeover by I/O and communication
Inspection Window			
Q'ty	Max. 128 screens / per process Max. 2 processes / per project	Max. 1,000 screens / per project	Max. 128 screens / per project
ROI Type	Rectangle, circle, polygon, ellipse, ring, sector, rotated rectangle	Rectangle, circle, polygon, ellipse, ring, sector, rotated rectangle	Rectangle, circle, polygon, ellipse, ring, sector, rotated rectangle
Mask Area	8 areas / window	8 areas / window	4 areas / window
Type	Rectangle, circle, polygon, ellipse, ring, sector, rotated rectangle	Rectangle, circle, polygon, ellipse, ring, sector, rotated rectangle	Rectangle, circle, polygon, ellipse, ring, sector, rotated rectangle
Execution Mode	Always execute, never execute, execute according to references	Always execute, never execute	Always execute, never execute, execute according to references
Inspection Units			
Shape	O	O	O
Edge Angle	O	O	O
Edge Count	O	O	O
Edge Pitch	O	O	O
Edge Position	O	O	O
Edge Width	O	O	O
Area	O	O	O
Blob	O	O	O
Intensity	O	O	O
Position Trace	O	O	O
Width Trace	O	O	O
Stain	O	O	O
OCV	O	O	O
Comparison	O	O	X
Color	O	O	X
1D Barcode	O	O	O
2D Barcode	O	O	O
Sorting	X	X	O
Mark	X	X	O
1P Position	X	O	X
Blob Matching	X	O	X

Specifications

Specifications	DMV3000G	DMV2000	DMV1000
Image Pre-process			
Binarization	O	O	O
Expansion	O	O	O
Erosion	O	O	O
Average	O	O	O
Median	O	O	O
Crispening	O	O	O
Laplacian	O	O	O
Sobel X	O	O	O
Sobel Y	O	O	O
Sobel	O	O	O
Prewitt	X	X	O
Roberts	X	X	O
Difference	O	O	O
Color Extraction	O	O	X
Brightness Adjustment	O	O	X
Contrast Enhancement	O	O	X
Shadow Compensation	O	O	X
Top Hat	X	O	X
Bottom Hat	X	O	X
Self-defined Filter	X	O	X
Numerical Calculation			
Q'ty	Max. 1,024 / Project	Max. 1,000 / Project	32
Arithmetic	Plus, Subtract, Multiply, Divide	Plus, Subtract, Multiply, Divide	Plus, Subtract, Multiply, Divide
Communication Protocols	Configurable input pins: 8 (high speed) Configurable output pins: 11 (high speed) RS-232 (max. 230,400 bps) RS-485 (max. 230,400 bps) Ethernet (10 / 100 / 1000 BASE-T)	Configurable input pins: 8 (high speed) Configurable output pins: 11 (high speed) RS-232 (max.115,200 bps) RS-485 (max. 230,400 bps) Ethernet (1000 BASE-T / 100 BASE-TX / 10 BASE-T)	RS-232 (max. 115,200 bps) RS-485 (max. 115,200 bps) Ethernet (10 / 100BASE-T)
Display			
Screen	XGA 1,024×768 output	FHD 1,920×1,080 output	XGA 1,024×768 output
Scale	5%~800% adjustable	5%~1,000% adjustable	20%~200% adjustable
Language	Traditional Chinese, Simple Chinese, English	Traditional Chinese, English	Traditional Chinese, Simple Chinese, English
Operation Interface			
Operation	Mouse (standard 3 keys)	Mouse (standard 3 keys)	Joystick
Camera Flash Control	I/O output control, max. 2 settings	I/O output control, max. 2 settings	I/O output control, max. 2 settings
Memory Card	Micro SD card (max. 32 GB); Class 10	Micro SD card (max. 32 GB); Class 10	SC card (max. 16 GB)

Product Parts - DMV3000G

Controller
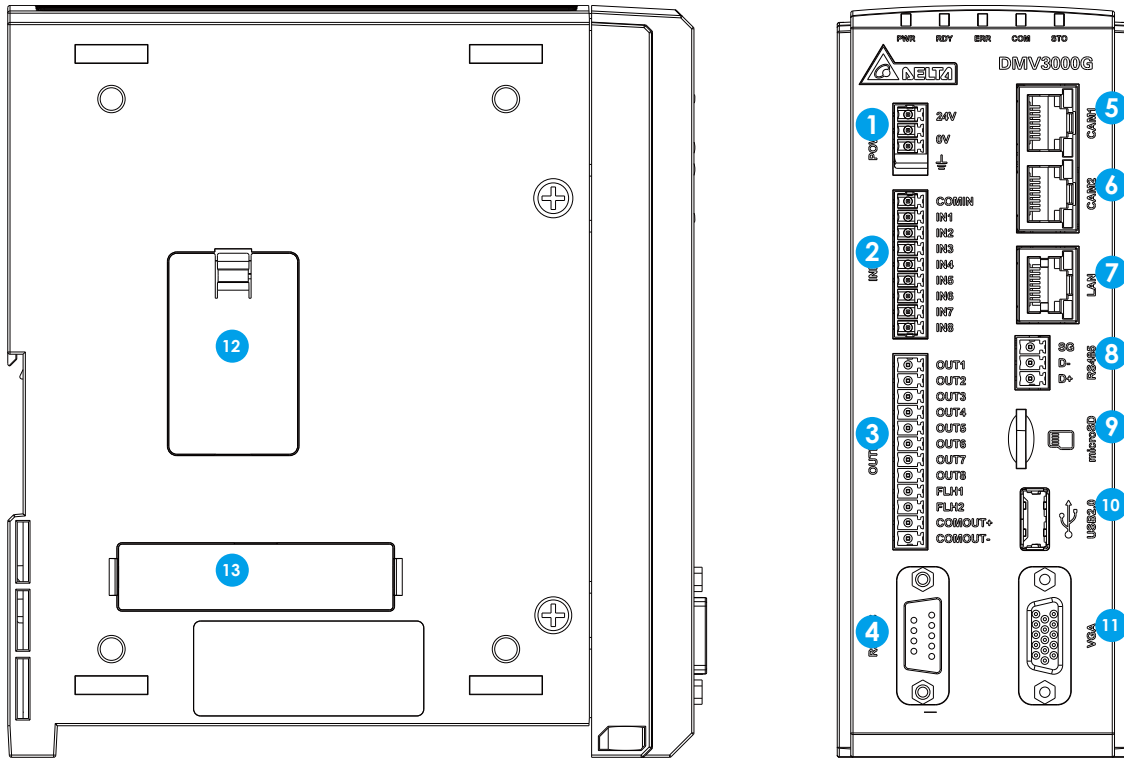
No.	Name	Description
1	Power supply	24 V Power input
2	Input I/O terminal block	Input terminal (9-pin)
3	Output I/O terminal block	Output terminal (12-pin)
4	RS-232 serial port	Supports master / slave serial communication
5	Camera 1 connector	GigE camera connection
6	Camera 2 connector	GigE camera connection
7	Ethernet connector	10/100/1000 BASE-T communication
8	RS-485 serial port	Supports master / slave serial communication
9	Micro SD card slot	Stores the project settings and images backup
10	USB 2.0 connector	Mouse
11	VGA output port	Connects to external VGA monitor
12	Button cell battery slot	Power supply for perpetual calendar operation
13	Expansion module slot	Flash control, expanded I/O

Product Parts - DMV3000G

9-Pin Power Terminal

No.	Name	Description
1	COMIN	9-pin input COM
2	IN1	Camera 1 capture trigger
3	IN2	Camera 2 capture trigger
4	IN3	Test status (no inspection results generated for output)
5	IN4	Trigger disabled (inspection disabled)
6	IN5	Parallel output handshaking flag
7	IN6	System reset
8	IN7	Disable image capture trigger
9	IN8	Controller parallel input handshaking sign

Default Setting
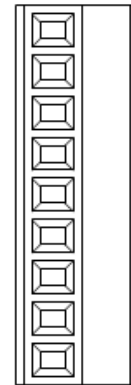
1 - COMIN
2 - IN1(TRG1)
3 - IN2(TRG2)
4 - IN3(TEST)
5 - IN4(TROFF)
6 - IN5(ACK)
7 - IN6(RST)
8 - IN7(TROFF)
9 - IN8(ACK)

12-Pin Power Terminal

No.	Name	Description
1	OUT1	Flow 1 standby for image capture and inspection output
2	OUT2	Flow 2 standby for image capture and inspection output
3	OUT3	Camera 1 capture complete
4	OUT4	Camera 2 capture complete
5	OUT5	Judgement Result Output 1
6	OUT6	Judgement Result Output 2
7	OUT7	Judgement Result Output 3
8	OUT8	Judgement Result Output 4
9	FLH1	Camera 1 flash output
10	FLH2	Camera 2 flash output
11	COMOUT+	Common output port (Please connect to a positive power supply)
12	COMOUT-	Common output port (Please connect to a negative power supply)

Default Setting

1 - OUT1(RDY)
2 - OUT2(RDY2)
3 - OUT3(REND1)
4 - OUT4(REND2)
5 - OUT5(TOUT1)
6 - OUT6(TOUT2)
7 - OUT7(TOUT3)
8 - OUT8(TOUT4)
9 - FLH1
10 - FLH2
11 - COMOUT+
12 - COMOUT-

Input Circuit (NPN)
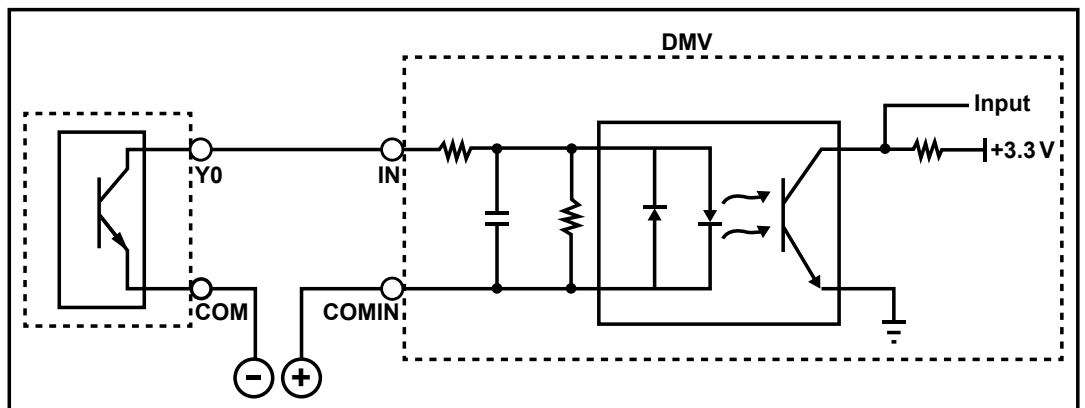
Input Circuit
(PNP Input)

Output Circuit
(NPN Output)

Input Circuit
(PNP Output)

FLASH Output
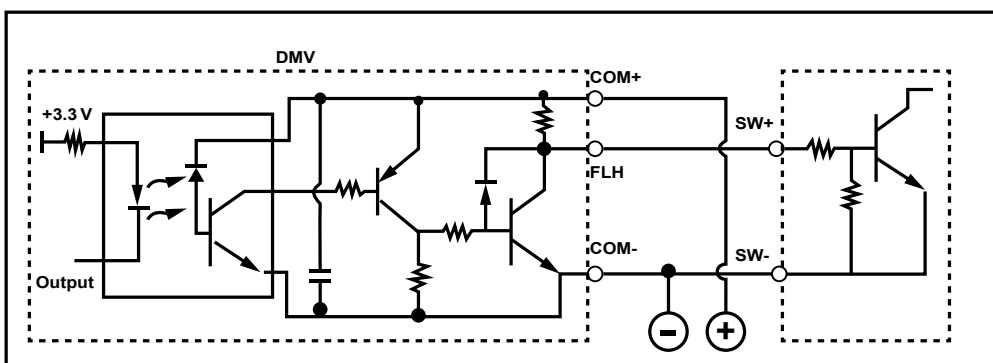
Product Parts - DMV2000

Controller
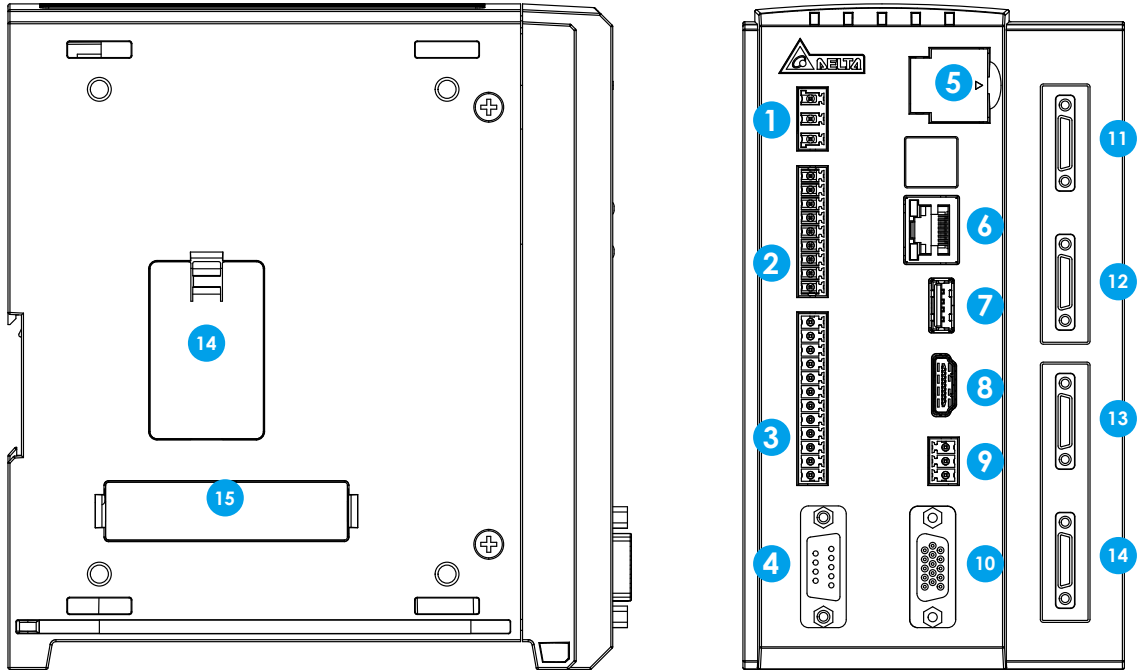
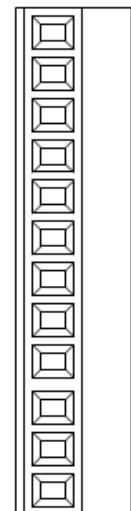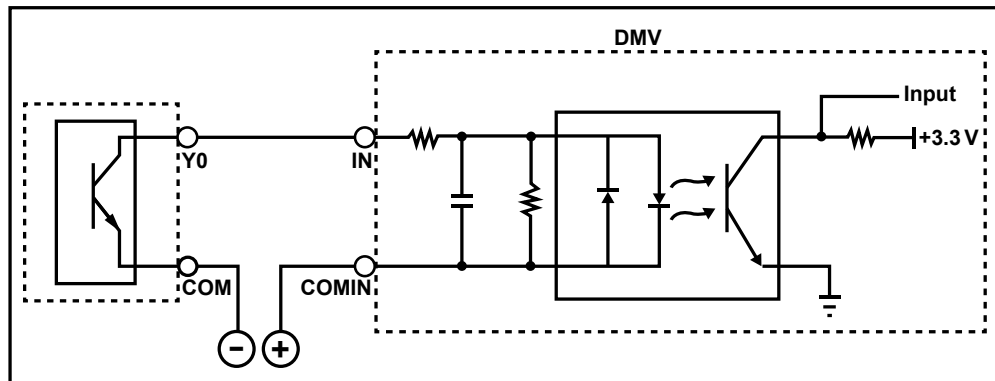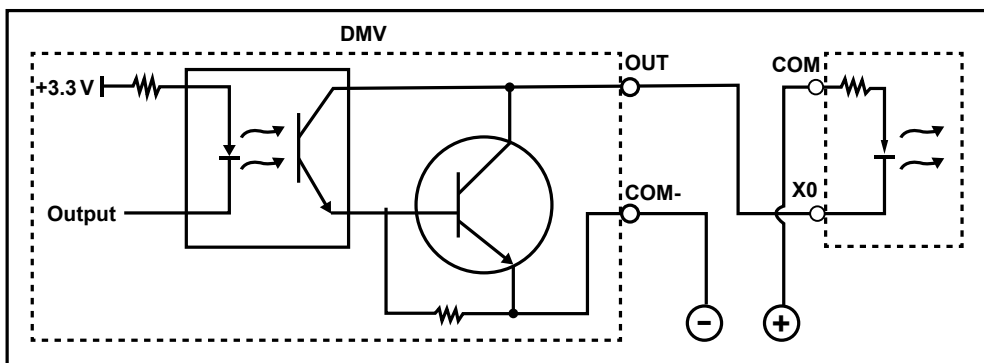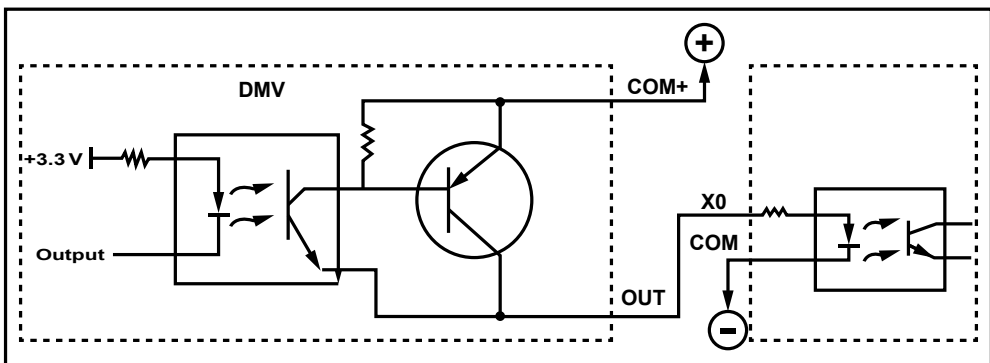| NO.	Name	Description
1	Power input terminal block	24 V power input
2	Input I/O terminal block	Input terminal (9-pin)
3	Output I/O terminal block	Output terminal (12-pin)
4	RS-232 serial port	Supports master / slave serial communication
5	Micro SD card slot	Stores the project settings and images backup
6	Ethernet connector	10 / 100 / 1000 BASE-T communication
7	USB 2.0 connector	Mouse
8	HDMI output port	Connects to external HDMI monitor (Resolution: 1,920 x 1,080)
9	RS-485 serial port	Supports master / slave serial communication
10	VGA output port	Connects to external VGA monitor (Resolution: 1,920 x 1,080)
11	Camera 1 connector	Resolution: 0.3 M, 2 M, 4 M, 5 M or 12 M camera
12	Camera 2 connector	Resolution: 0.3 M, 2 M, 4 M, 5 M or 12 M camera
13	Camera 3 connector	Resolution: 0.3 M, 2 M, 4 M, 5 M or 12 M camera
14	Camera 4 connector	Resolution: 0.3 M, 2 M, 4 M, 5 M or 12 M camera
15	Button cell battery slot	Power supply for perpetual calendar operation
16	Expansion module slot	Camera flash control, expanded I/O

3-Pin Power Terminal

NO.	Name	Description
1	+24V	Positive power supply
2	0V	Negative power supply
3	E	Grounding

Default Setting

1 - +24V
2 - 0V
3 - E

9-Pin Power Terminal

NO.	Name	Description
1	COMIN	9-pin input COM
2	IN1 (TRG1)	Camera 1 image capture trigger
3	IN2 (TRG2)	Camera 2 image capture trigger
4	IN3 (TRG3)	Camera 3 image capture trigger
5	IN4 (TRG4)	Camera 4 image capture trigger
6	IN5 (TEST)	Test condition (no data output)
7	IN6 (PLINK)	PLC communication link start sign
8	IN7 (TROFF)	Disable image capture trigger
9	IN8 (ACK)	Controller parallel input handshaking sign

Default Setting

1 - COMIN
2 - IN1 (TRG1)
3 - IN2 (TRG2)
4 - IN3 (TRG3)
5 - IN4 (TRG4)
6 - IN5 (TEST)
7 - IN6 (PLINK)
8 - IN7 (TROFF)
9 - IN8 (ACK)
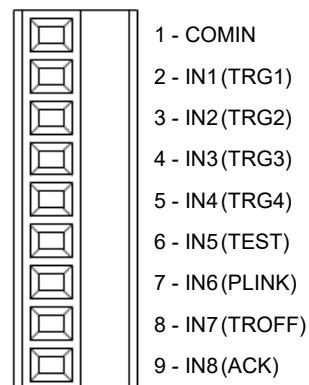
12-Pin Output

NO.	Name	Description
1	OUT1	Controller standby for image capture and inspection output
2	OUT2	Judgement Result Output 1
3	OUT3	Judgement Result Output 2
4	OUT4	Error indicator
5	OUT5	Parallel output handshake flag
6	OUT6	Camera 1 capture complete
7	OUT7	Camera 2 capture complete
8	OUT8	Camera 3 capture complete
9	FLH1	Camera 2 flash output
10	FLH2	Camera 2 flash output
11	COMOUT+	Common output port (Please connect to a positive power supply)
12	COMOUT-	Common output port, (Please connect to a negative power supply)

Default Setting

1 - OUT1 (RDY)
2 - OUT2 (TOUT1)
3 - OUT3 (TOUT2)
4 - OUT4 (ERROR)
5 - OUT5 (STR)
6 - OUT6 (REN1)
7 - OUT7 (REN2)
8 - OUT8 (REN3)
9 - FLH1
10 - FLH2
11 - COMOUT+
12 - COMOUT-
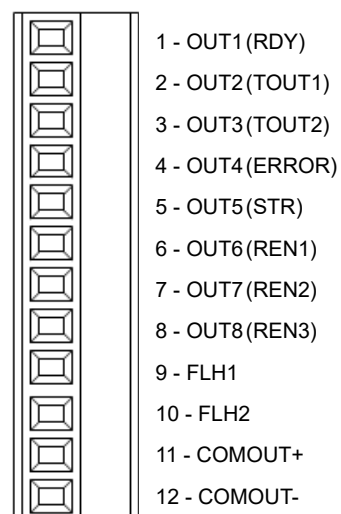
Product Parts - DMV2000

Input Circuit
(NPN Input)
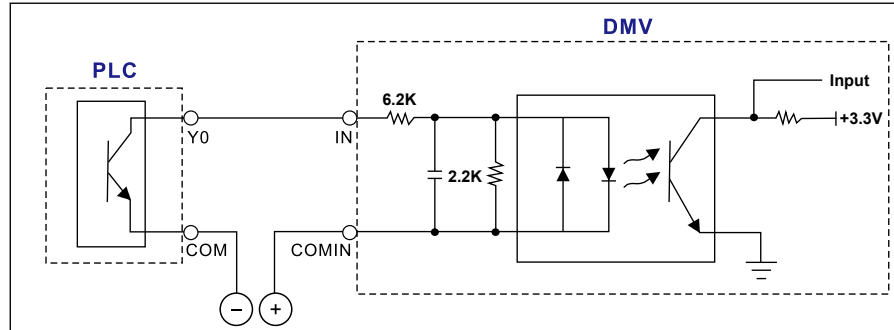

Input Circuit
(PNP Input)

Output Circuit
(NPN Output)
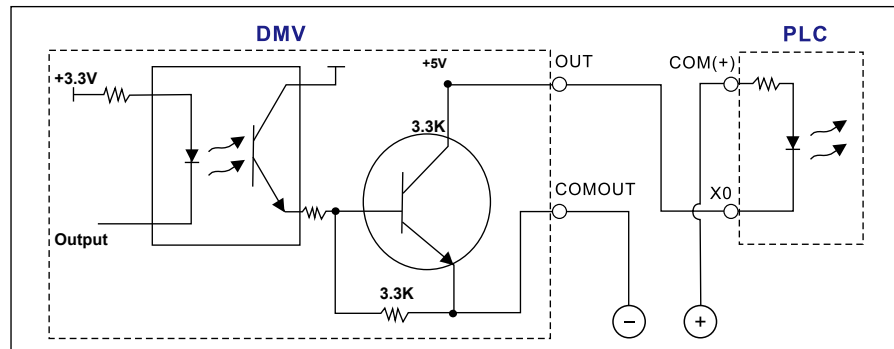
FLASH Output
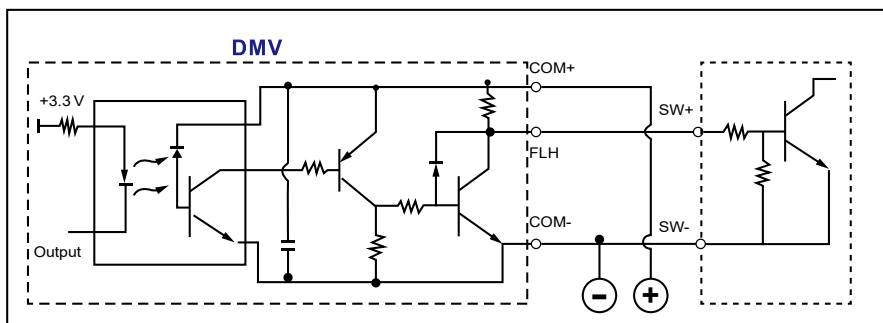
Product Parts - DMV1000

Controller
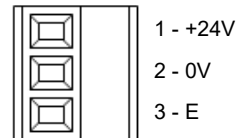
NO.	Name	Description
1	Parallel I/O interface	Input / Output
2	Output I/O terminal block	Output
3	Input I/O terminal block	Input
4	Ethernet connector	10 / 100BASE-T communication
5	Keypad connector	Connect to keypad
6	RS-232 / RS-485 serial port	Supports Master / slave serial communication
7	VGA output port	Connects to external VGA monitor made by other manufacturers
8	SD memory card	Stores the project settings and images backup
9	Camera 1 connector	Resolution: 1024×768, 640×480
10	Camera 2 connector	Resolution: 1024×768, 640×480
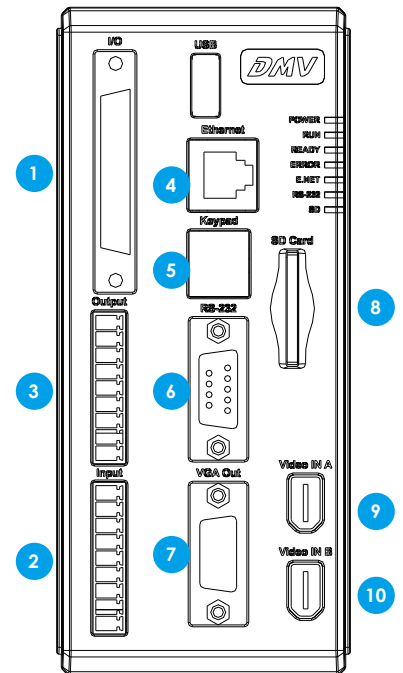
Joystick

NO.	Name	Description
1	Move and Enter	8 directions selectable and enter setting
2	PROG / RUN	Switches between programming mode and run mode
3	TRIG	Inspection trigger
4	FUNC	Selects different modes during RUN operation
5	DISPLAY	Switches inspection windows of camera 1 and camera 2
6	CUSTOM	Image preprocessing select
7	ESCAPE	Exit key
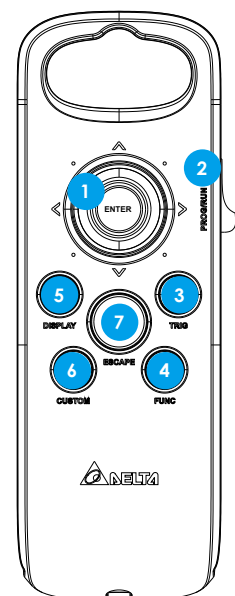
Product Parts - DMV1000

9-Pin Power Terminal

NO.	Name	Description
1	COMIN1	9-pin input COM
2	TRIG1	Camera 1 image capture trigger
3	TRIG2	Camera 2 image capture trigger
4	PLINK	PLC communication link start sign
5	TROFF	Disable image capture trigger
6	TEST	Test condition (no data output)
7	+24V	Positive power supply
8	0V	Negative power supply
9	E	Grounding
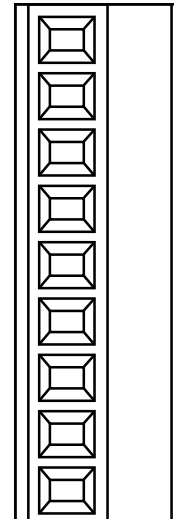
1-COMIN1
2-TRIG1
3-TRIG2
4-PLINK
5-TROFF
6-TEST
7-+24V
8-0V
9-E

9-Pin Output

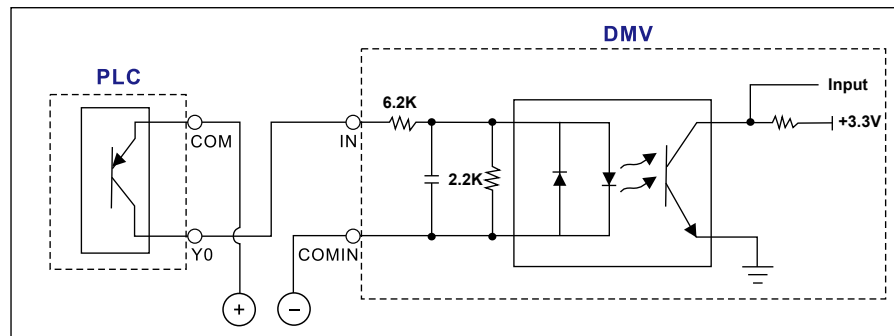| NO.	Name	Description
1	TOUT	Overall inspection result output
2	RUN (TOUT2)	Operation status indicator (TOUT2)
3	READY	Controller ready for image inspection result output
4	ERROR	Error(s) occur(s)
5	COMOUT1	Common 9-pin output port
6	FLASH1	Camera 1 flash output
7	FLASH2	Camera 2 flash output
8	COMFLA+	Common output port (Please connect to a positive power supply)
9	COMFLA-	Common output port (Please connect to a negative power supply)
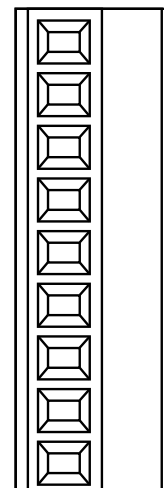
1-TOUT
2-RUN (TOUT2)
3-READY
4-ERROR
5-COMOUT1
6-FLASH1
7-FLASH2
8-COMFLA+
9-COMFLA -

Input Circuit

(NPN)
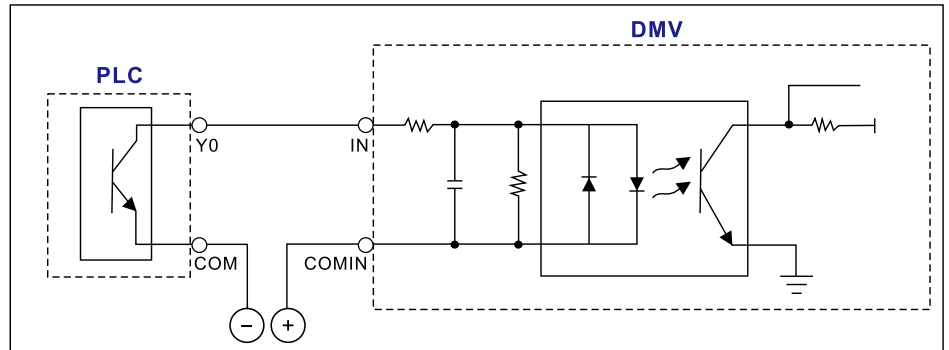
Input Circuit

(PNP Input)
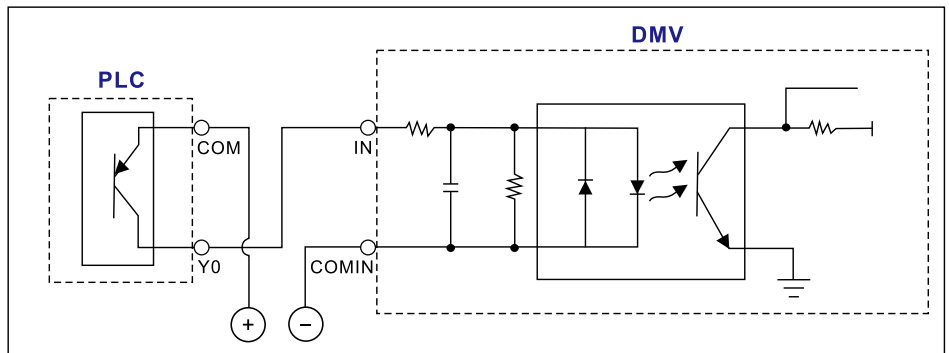
Output Circuit

(NPN Output)

(FLASH 1 and

FLASH 2 Excluded)
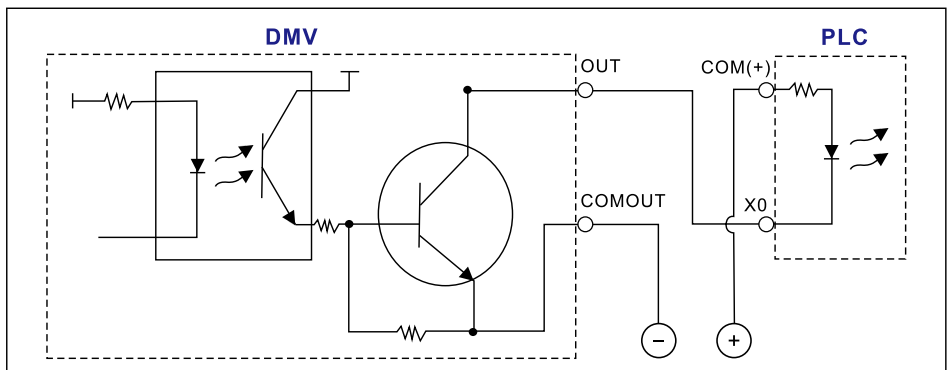
**FLASH 1 & 2
Output Circuit**
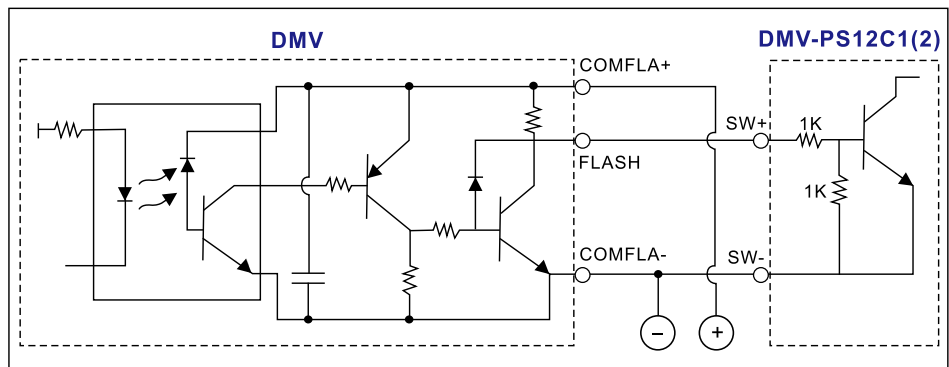
Dimensions

DMV3000G Controller

Unit: mm
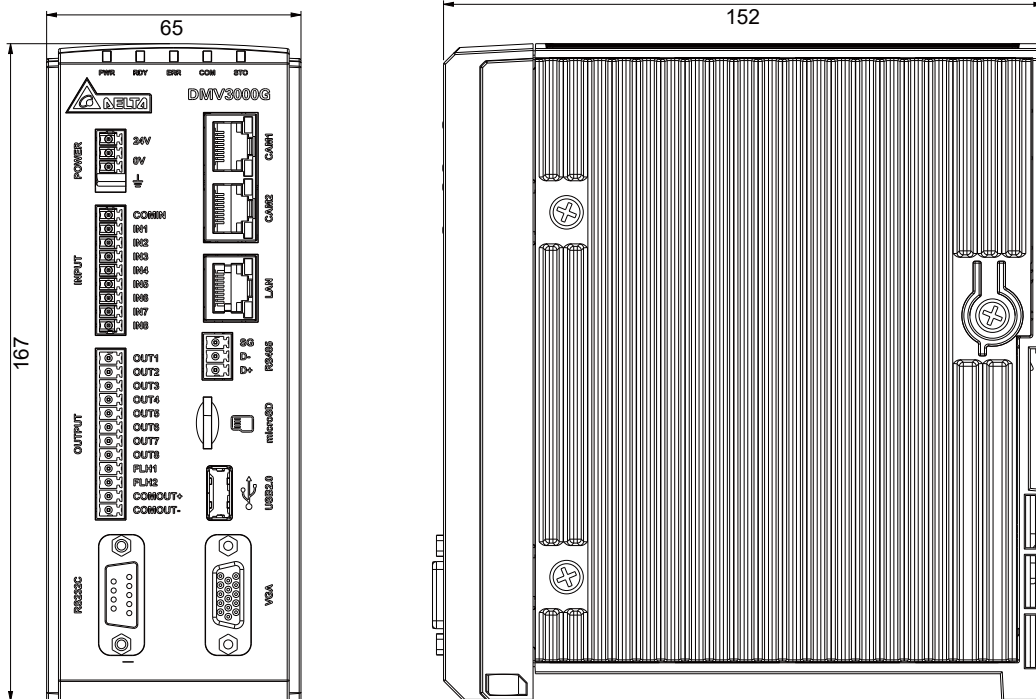
Camera for DMV3000G
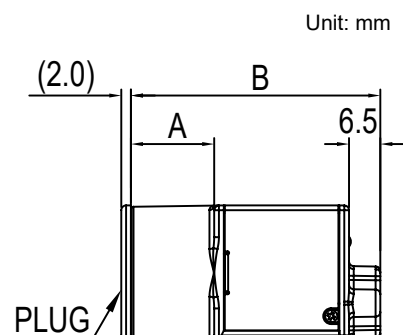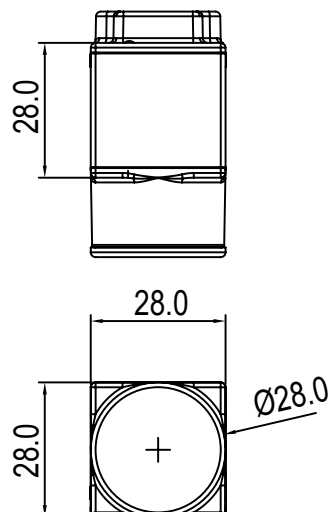
Unit: mm

Dimensions	A	B
DMV-CM2MXXX-D	17.30 mm	51.80 mm
DMV-CM30XXX-D	16.18 mm	50.68 mm

DMV2000 Controller

152.20

96.00

167.50

Cameras for DMV2000
CMOS 0.3 M

40

30

4-M4 Depth4

40

30

38

12

22.7

7

C Mount

φ32

16.8

25

4-M4 Depth4
All sides same position

22.2

12.6

CH1   CH2

13

1/4" 20UNC
Depth 5
(Both Side)
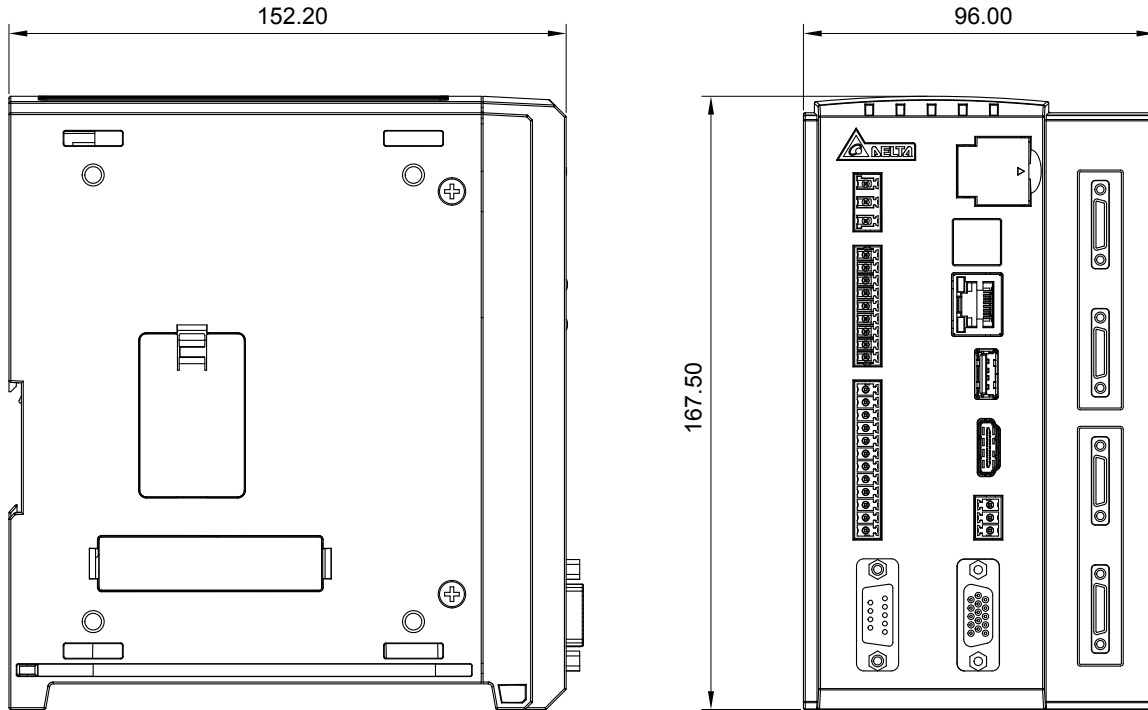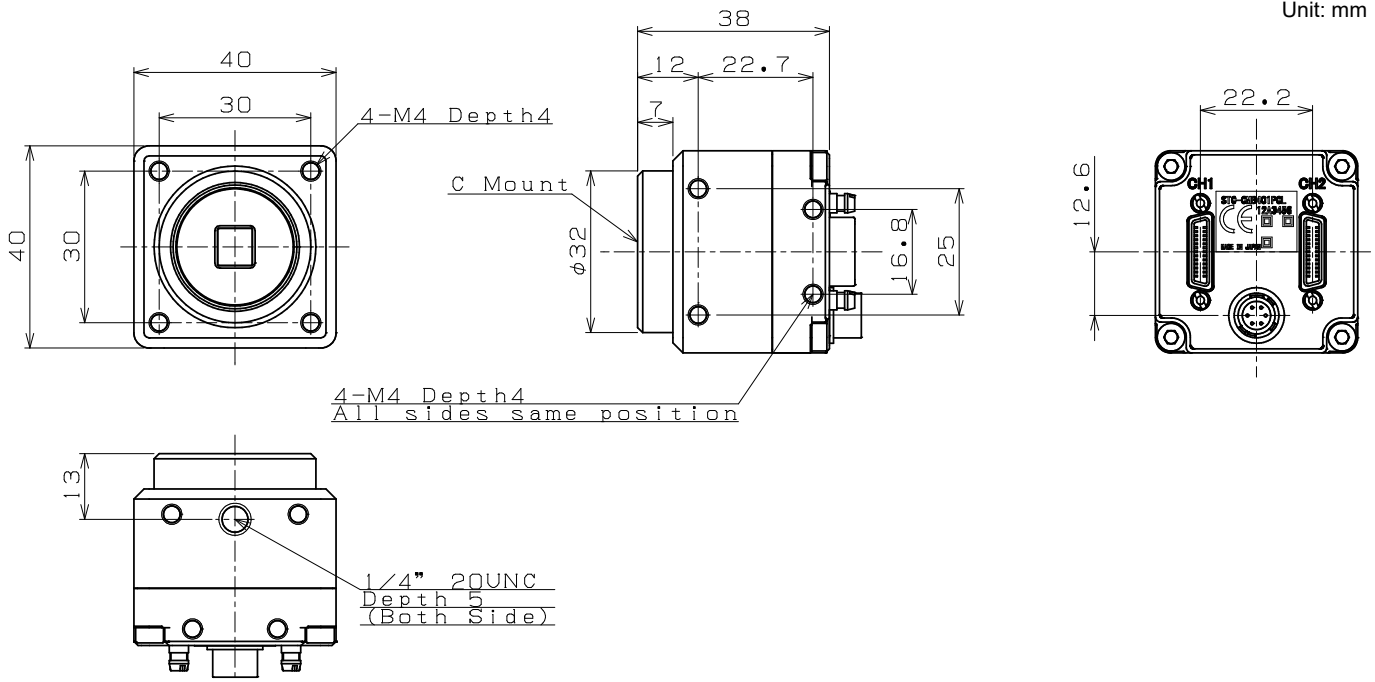
Dimensions

Cameras for DMV2000

CMOS 2 M / 4 M

Unit: mm

4-M4 Depth4

C Mount

4-M4 Depth4
All sides same position

1/4" 20UNC
Depth 5
(Both Side)

CMOS 5 M

4-M4 Depth4
Screw for camera tripod Depth5
Top and bottom are same shape

Unit: mm

C Mount

4-M4 Depth4

Left and right are same shape

CMOS 12 M

All sides same position

Unit: mm

All sides same position
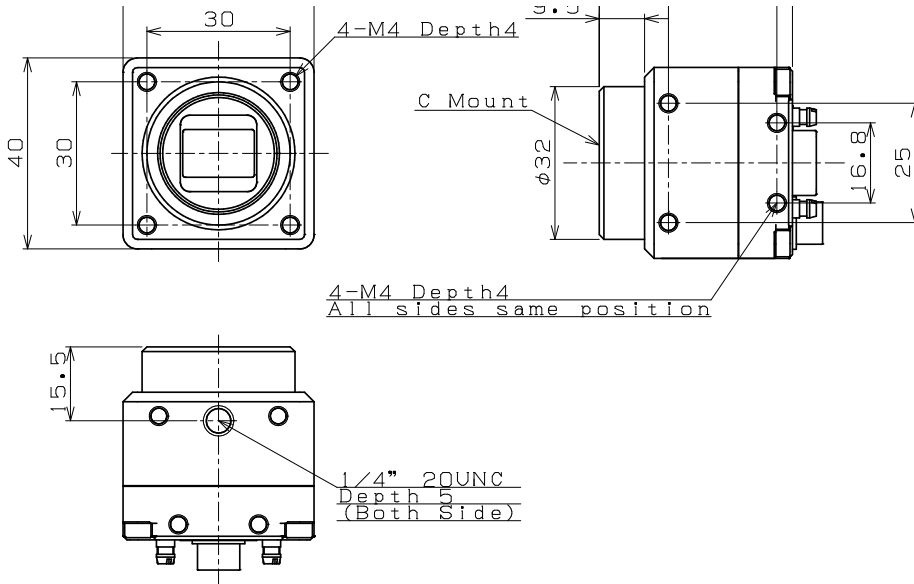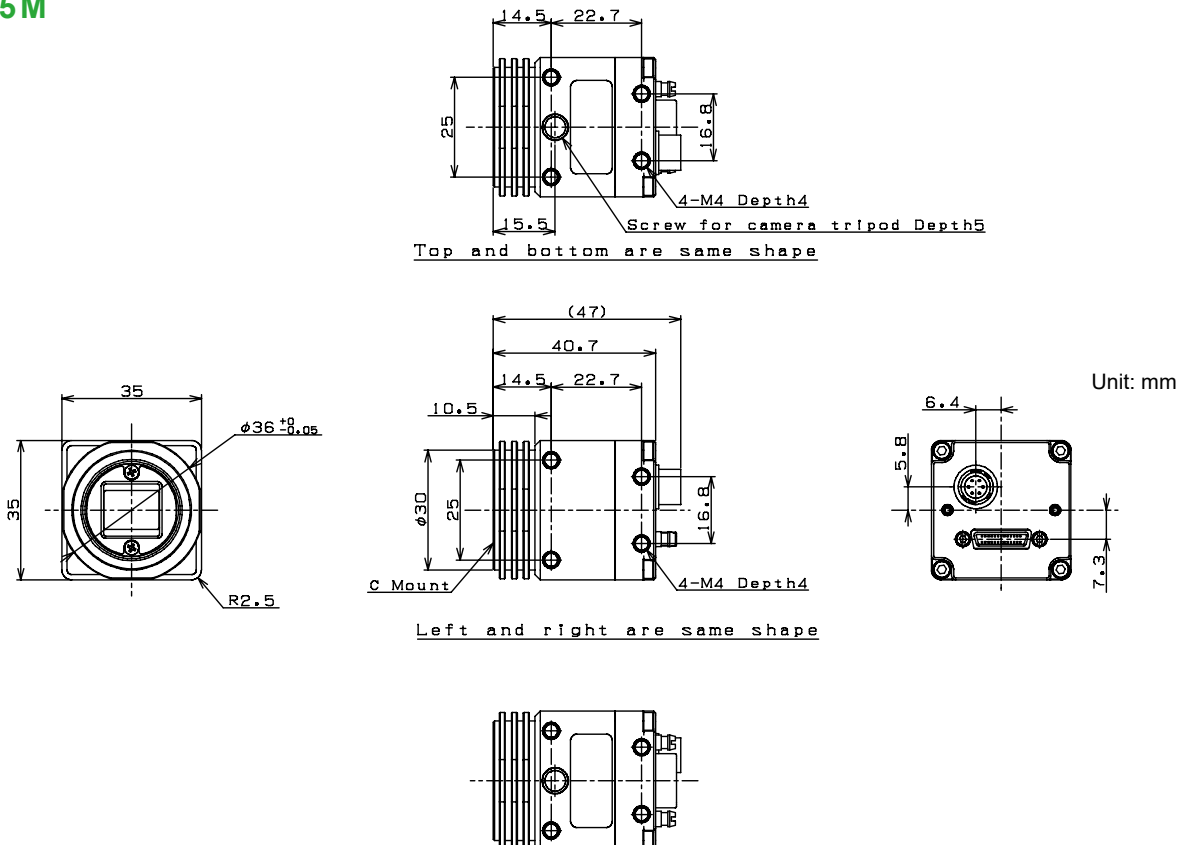
Dimensions

DMV1000 Controller

143.20

63.00

98.50

DMV1000 Joystick

44.7

33.7

129.4
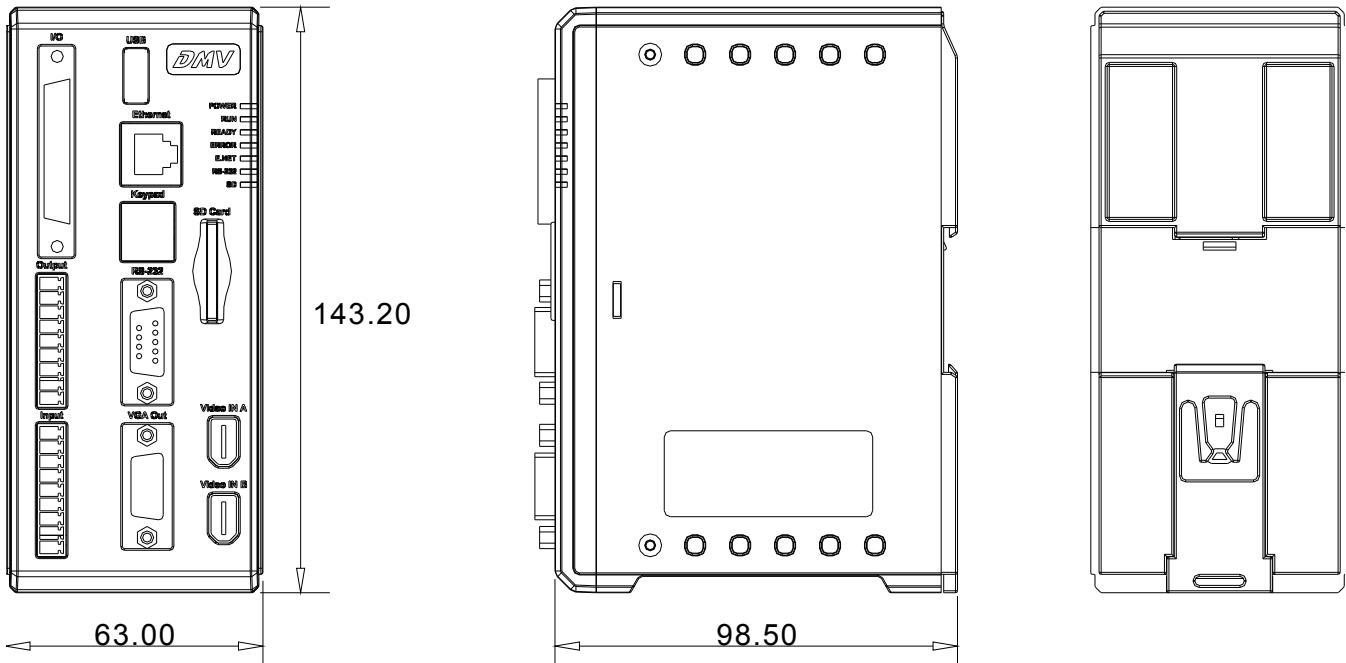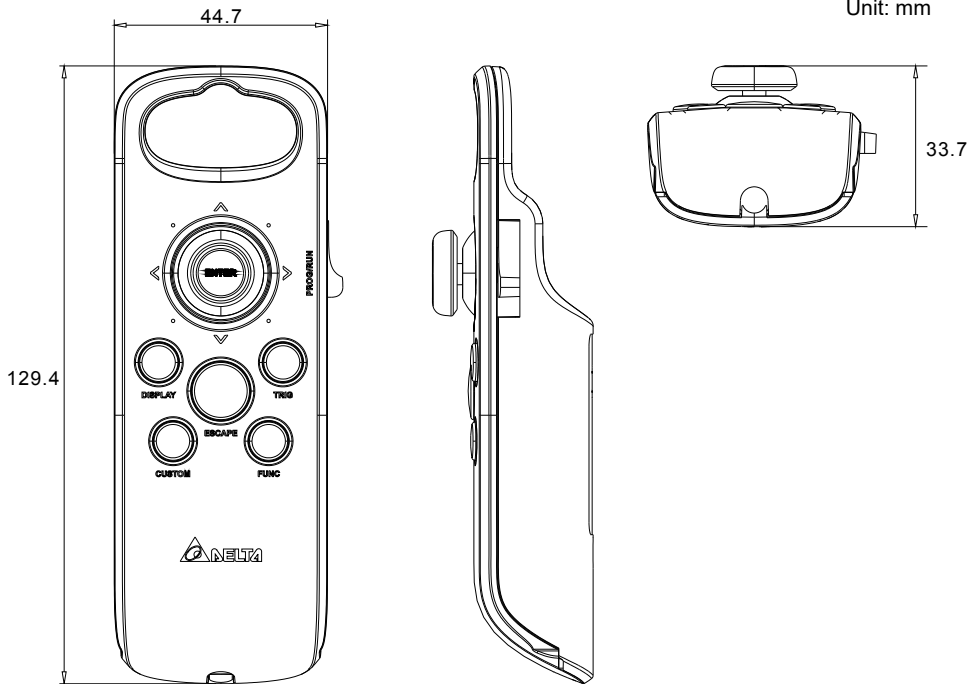
Camera for DMV1000

29.0

29.0

42.3

Unit: mm
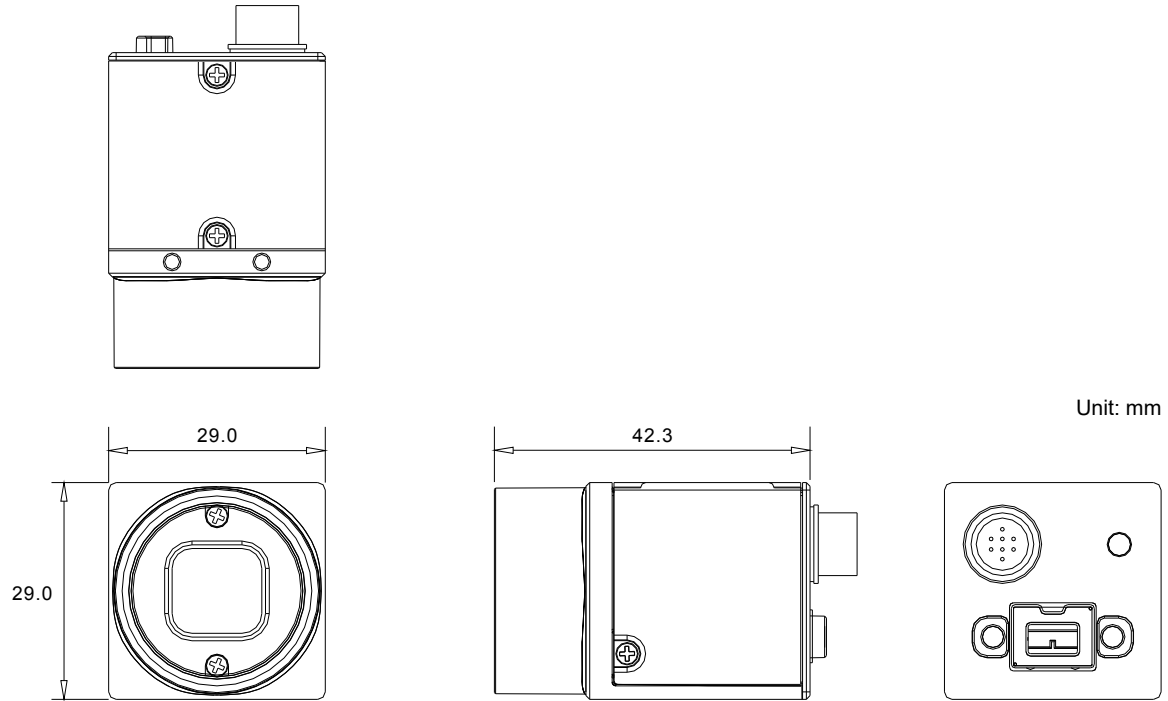
Ordering Information

▪ Controllers

DMV3000G	**DMV3000-GE2-VL**	Standard model controller for max. 2 cameras connectable
DMV2000	**DMV2000-CL2-HS**	Standard model controller for max. 2 cameras connectable
	DMV2000-CL4-HS	Standard model controller for max. 4 cameras connectable
DMV1000	**DMV1000-80GXC**	Standard model controller for max. 2 cameras connectable

▪ High-speed Camera Cables

DMV2000	**DMV-CAF03CL**	CameraLink FLEX cable (3M, flexible)
	DMV-CAF05CL	CameraLink FLEX cable (5M, flexible)
DMV1000	**DMV-CA45**	IEEE1394 cable (4.5 M)
	DMV-CA50F	IEEE1394 flexible cable (5M, flexible)

▪ Joystick

DMV1000	**DMV1000-KEY**	Specifically for DMV1000

▪ Illumination

DMV3000G **DMV2000** **DMV1000**	**DMV-CX40W**	Coaxial white light
	DMV-DR6736R	Direct ring (red)
	DMV-DR6736W	Direct ring (white)
	DMV-DR6736D	Diffusion board
	DMV-BL60R	Back light (red)

▪ Cameras

DMV3000G	**DMV-CM30CGE-D** **DMV-CM30CGT-D**	CMOS CAMERA 0.3 M COLOR CameraLink (640 x 480)
	DMV-CM30GGE-D **DMV-CM30GGT-D**	CMOS CAMERA 0.3 M MONO CameraLink (640 x 480)
	DMV-CM2MCGE-D **DMV-CM2MCGT-D**	CMOS CAMERA 2.0 M COLOR CameraLink (1600 x 1200)
	DMV-CM2MGGE-D **DMV-CM2MGGT-D**	CMOS CAMERA 2.0 M MONO CameraLink (1600 x 1200)
DMV2000	**DMV-CM30CCL**	CMOS CAMERA 0.3 M COLOR CameraLink (640 x 480)
	DMV-CM30GCL	CMOS CAMERA 0.3 M MONO CameraLink (640 x 480)
	DMV-CM2MCCL	CMOS CAMERA 2.0 M COLOR CameraLink (2048 x 1088)
	DMV-CM2MGCL	CMOS CAMERA 2.0 M MONO CameraLink (2048 x 1088)
	DMV-CM4MCCL	CMOS CAMERA 4.0 M COLOR CameraLink (2048 x 2048)
	DMV-CM4MGCL	CMOS CAMERA 4.0 M MONO CameraLink (2048 x 2048)
	DMV-CM5MCCL	CMOS CAMERA 5.0 M COLOR CameraLink (2448 x 2048)
	DMV-CM5MGCL	CMOS CAMERA 5.0 M MONO CameraLink (2448 x 2048)
	DMV-CM12MCCL	CMOS CAMERA 12 M COLOR CameraLink (4096 x 3072)
	DMV-CM12MGCL	CMOS CAMERA 12 M MONO CameraLink (4096 x 3072)
DMV1000	**DMV-CDA30GS**	CMOS CAMERA 0.3 M MONO CameraLink (640 x 480)
	DMV-CDA80GS	CMOS CAMERA 0.8 M MONO CameraLink (1024 x 768)

▪ Power Supply (for LED Illumination)

DMV3000G **DMV2000** **DMV1000**	**DMV-PS12C1**	Single-channel output
	DMV-PS12C2	Dual-channel output
	DMV-CA30P	Extension cable for illumination

Ordering Information

▪ Cameras

Controller		DMV3000G			
Camera		DMV-CM30GGE-D DMV-CM30CGE-D	DMV-CM2MGGE-D DMV-CM2MCGE-D	DMV-CM30GCL DMV-CM30CCL	DMV-CM2MGCL DMV-CM2MCCL
Camera	Lens				
DMV-LN06W40	0.4 M 2/3" 6 mm	●		●	
DMV-LN08W40	0.4 M 2/3" 8 mm	●		●	
DMV-LN12W40	0.4 M 2/3" 12 mm	●		●	
DMV-LN16W40	0.4 M 2/3" 16 mm	●		●	
DMV-LN25W40	0.4 M 2/3" 25 mm	●		●	
DMV-LN35W40	0.4 M 2/3" 35 mm	●		●	
DMV-LN50W40	0.4 M 2/3" 50 mm	●		●	
DMV-LN75W40	0.4 M 2/3" 75 mm	●		●	
DMV-LN100W40	0.4 M 2/3" 100 mm	●		●	
DMV-LN05M	2 M 2/3" 5 mm	○	●	○	●
DMV-LN06M	2 M 2/3" 6 mm	○	●	○	●
DMV-LN08M	2 M 2/3" 8 mm	○	●	○	●
DMV-LN12M	2 M 2/3" 12 mm	○	●	○	●
DMV-LN16M	2 M 2/3" 16 mm	○	●	○	●
DMV-LN25M	2 M 2/3" 25 mm	○	●	○	●
DMV-LN35M	2 M 2/3" 35 mm	○	●	○	●
DMV-LN50M	2 M 2/3" 50 mm	○	●	○	●
DMV-LN12M05	5 M 1" 12.5 mm	○	○	○	○
DMV-LN35M05	5 M 1" 35 mm	○	○	○	○
DMV-LN50M05	5 M 1" 50 mm	○	○	○	○
DMV-LN12M06	6 M 1" 12 mm	○	○	○	○
DMV-LN16M06	6 M 1" 16 mm	○	○	○	○
DMV-LN25M06	6 M 1" 25 mm	○	○	○	○
DMV-LN35M06	6 M 1" 35 mm	○	○	○	○
DMV-LN50M06	6 M 1" 50 mm	○	○	○	○
DMV-LN28M12	12 M F-Mount 28mm				
DMV-LN35M12	12 M F-Mount 35mm				
DMV-LN50M12	12 M F-Mount 50mm				

Description：

● = Standard

○ = Alternative

DMV2000			DMV1000	
DMV-CM4MGCL **DMV-CM4MCCL**	**DMV-CM5MGCL** **DMV-CM5MCCL**	**DMV-CM12MGCL** **DMV-CM12MCCL**	**DMV-CDA30GS**	**DMV-CDA80GS**
			●	
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(Technology Center & Plant 1)

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ΛNELTA

Smarter. Greener. Together.

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