IV2-G30F

Sensor amplifier Learning/standard mode

CE CSA

SPECIFICATIONS

Model		IV2-G30F
Type		Learning/standard type
Tools	Available modes	Learning mode / Standard mode
	Standard mode built-in tools	Outline, Color area[*1], Area[*2], Edge pixels, Color average[*1], Brightness average[*2], Width, Diameter, Edge presence, Pitch, OCR, Color/brightness prohibit, Position adjustment, High-speed position adjustment (1-axis edge/2-axis edge)
	Number of tools	Detection tools: 16 tools, position adjustment tool: 1 tool[*3]
Switch settings (programs)		128 programs (when using SD card) / 32 programs (when not using SD card)
Image history	Number of storable images	1000 images [*4]
	Save conditions	Selectable between NG only, NG and OK near threshold[*5], and All [*4]
Image data transfer	Transfer destination	Selectable between SD card and FTP server
	Transfer format	Selectable between bmp, jpeg, iv2p, and txt
	Transfer conditions	Selectable between NG only, NG and OK near threshold[*5], and All
Analysis information	RUN display	Tools list (Judgment results, degree of similarity, or degree of similarity bar display) [*6]
	RUN information	Switchable between OFF, histogram, processing time, count, and output monitor Histograms: Histogram, degree of similarity (Max., Min., Ave.), Number of OKs, Number of NGs Processing time: Processing time (latest, Max., Min., Ave.), Image capture interval (latest, Max., Min., Ave.) Count: Trigger numbers, Number of OKs, Number of NGs, Trigger errors, Strobe errors Output monitor: ON/OFF status by output
Other functions	Image capture function	Image buffer, Image capture range, Digital zoom (2×, 4×), HDR, High gain, Color filter[*1], White balance[*1], Brightness correction
	Tool functions	Learning mode: Additional learning Standard mode: Mask outline, Masking function, Color extraction/exclusion[*1], Color histogram function[*1], Monochrome histogram function[*2], Scaling function
	Utilities	Failing sensor list, Failure hold, Test run, I/O monitor, Security settings, Simulator[*7]
Indicators		PWR/ERR, OUT, TRIG, STATUS, LINK/ACT, SD
Input	Type	Switchable between non-voltage input and voltage input For non-voltage input: ON voltage 2 V or lower, OFF current 0.1 mA or lower, ON current 2 mA (short circuit) For voltage input: Maximum input rating 26.4 V, ON voltage 18 V or higher, OFF current 0.2 mA or lower, ON current 2 mA (for 24 V)
	Number of inputs	8 (IN1 to IN8)
	Function	IN1: External trigger, IN2 to IN8: Enable by assigning optional functions Assignable functions: Program switching, Clear error, External master image registration, SD card save cancel
Output	Type	Open collector output; NPN/PNP switchable, N.O./N.C. switchable For open collector NPN output: Maximum rating of 26.4 V, 50 mA, residual voltage of 1.5 V or less For open collector PNP output: Maximum rating of 26.4 V, 50 mA, residual voltage of 2 V or less
	Number of outputs	8 (OUT1 to OUT8)
	Function	Enable by assigning optional functions Assignable functions: Total judgment (OK/NG), Run, Busy, Ready, Strobe, Position adjustment result, Judgment result of each tool, Result of the logical operation of each tool, Error, SD card error
Ethernet	Standard	100BASE-TX/10BASE-T
	Connector	RJ45 8-pin connector
Network function		FTP client, SNTP client
Interface compatibility	Built-in Ethernet	EtherNet/IP[TM], PROFINET, TCP/IP non-procedure communication
	Communication unit	EtherCAT®, CC-Link, DeviceNet[TM], PROFIBUS, RS-232C[*8]
Expanded memory		SD card (SD/SDHC) [*9]
Ratings	Power voltage	24 VDC ±10% (including ripple)
	Current consumption	1.8 A or less (including communication unit and output load)
Environmental resistance	Ambient temperature	0 to +50°C 32 to 122°F (No freezing)
	Relative humidity	35 to 85% RH (No condensation)
Material		Main unit case: PC, Power connector: PA/POM, I/O connector: PA, Sensor head connector: Zinc + Ni plating/PA, Ethernet connector: Copper alloy + Ni plating, Main unit rear heat sink: Aluminum, Main unit rear DIN rail fixing tab: POM, Nameplate: PC
Weight		Approx. 330 g

[*1] Color type only.
[*2] Monochrome type only.
[*3] Tools can be installed by programs.
[*4] Saves to the sensor amplifier's internal memory.
The images saved to the sensor amplifier can be backed up to a USB memory stick inserted into the control panel (IV2-CP50) or to the PC where the software for the IV2 Series (IV2-H1) is being used.
[*5] Learning mode only.
[*6] Can also be displayed on the control panel (IV2-CP50) or the software for the IV2 Series (IV2-H1).
[*7] Usable on the software for the IV2 Series (IV2-H1).
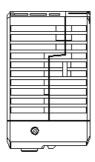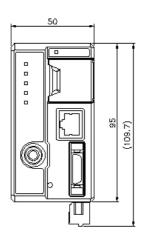[*8] When a communication unit (DL Series) is connected.
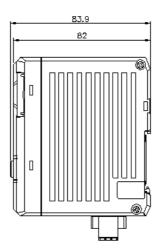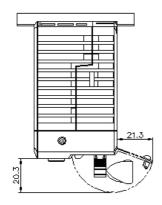
*9 Use only products recommended by KEYENCE.

Dimensions

* Download CAD file or product manual for larger image/text and more detail.

IV2-G30F/IV2-G30

50

95

(109.7)

83.9

82

21.3

20.3

(160.8) When an Ethernet cable is used

(141.6)

86.8

50

DIN rail

(61.5)

(48.2)

LAN cable or Ethernet cable

Cable between head and amplifier

I/O cable