



IV2-G30F

Sensor amplifier Learning/standard mode

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SPECIFICATIONS

Topic	Model		IV2-G30F
Available modes			
Standard mode built-in books Commission Color and 1, Anna 5, Saga practs. Calar screening 1 (Egyphoses precape) 1, Victor (Insureton Calago precape) 1, Number of tools Commission England (CoRR, Color inglifere prohibil, Problement, High-speed position adjustment (1 x-avis edged 2-avis et al., 1975) Commission Color and Saga Precape (1 x-avis edged 2-avis et al., 1975) Commission Color and Saga Precape (1 x-avis edged 2-avis et al., 1975) Commission Color and Saga Precape (1 x-avis edged 2-avis et al., 1975) Commission Color and Saga Precape (1 x-avis edged 2-avis et al., 1975) Commission Color and Saga Precape (1 x-avis edged 2-avis et al., 1975) Commission Color and Saga Precape (1 x-avis edged 2-avis et al., 1975) Commission Color and Saga Precape (1 x-avis edged 2-avis et al., 1975) Commission Color and Saga Precape (1 x-avis edged 2-avis et al., 1975) Color and Saga Precape (1 x		Available modes	
Switch settings (programs) Image history All switch settings (programs) Image history All switch settings (programs) Switch settings (programs) Image history All switch settings (programs) Switch settings (programs) Image data transfer Transfer destination Transfer format Setclable between NG only, NG and OK near threshold ²² , and All ¹⁴ Transfer format Setclable between NG only, NG and OK near threshold ²² , and All ¹⁴ Transfer format Setclable between NG only, NG and OK near threshold ²² , and All ¹⁴ Transfer conditions All display Tools let (Judgment results, degree of similarity, or degree of similarity bar display) ¹⁵ Witchable between NG only, NG and OK near threshold ²³ , and All RUN information RUN information RUN information RUN information RUN information Transfer format Image capture functions Image capture function Transfer minders, Number of NGs, Trapper errors, Shobe errors Outsut minder Name of OKs, Number of NGs, Trapper errors, Shobe errors Outsut minder Name of OKs, Number of NGs, Trapper errors, Shobe errors Outsut minder Name of OKs, Number of NGs, Trapper errors, Shobe errors Tool functions Tool functions Image buffer, Image papture range, Digital zoom (zx, 4+), HDR, High gain, Color filter ¹¹ , White balance ¹² , Bright as correction United Formation of Short Shop of Short Shop of Short Shop of Short Shop of Short	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 ed
Mumber of storable images Save conditions		Number of tools	Detection tools: 16 tools, position adjustment tool: 1 tool' ³
Save conditions	Switch settings (programs)		128 programs (when using SD card) / 32 programs (when not using SD card)
Image data transfer Transfer destination Selectable between SQ card and FTP server	Image history	Number of storable images	1000 images *4
Parameter format Selectable between bmp, jpge, iv2p, and txt		Save conditions	Selectable between NG only, NG and OK near threshold 5, and All 4
Transfer conditions Selectable between NG only, NG and OK near threshold*, and All	Image data transfer	Transfer destination	Selectable between SD card and FTP server
Analysis information RUN display RUN display RUN information RUN display R		Transfer format	Selectable between bmp, jpeg, iv2p, and txt
RUN information Run inform		Transfer conditions	Selectable between NG only, NG and OK near threshold*5, and All
RUN information Solidant So	Analysis information	RUN display	Tools list (Judgment results, degree of similarity, or degree of similarity bar display) *6
Second		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
Sandard mode: Mask outline, Masking function, Color extraction/exclusion ¹ , Color histogram function ¹ , Monocome histogram function ² , Scaling function Utilities Failing sensor list, Failin	Other functions	Image capture function	Image buffer, Image capture range, Digital zoom (2×, 4×), HDR, High gain, Color filter*1, White balance*1, Brightn ss correction
Indicators PWRJERR, OUT, TRIG, STATUS, LINK/ACT, SD Input Type Switchable between non-voltage input and voltage input For voltage input and voltage input For voltage input Auxiliary input and voltage of Voltage input and voltage input and voltage of Voltage input and voltage input and voltage of Voltage input and		Tool functions	Standard mode: Mask outline, Masking function, Color extraction/exclusion*1, Color histogram function*1, Monochi
Type Switchable between non-voltage input and voltage input for convoltage input and voltage input		Utilities	Failing sensor list, Failure hold, Test run, I/O monitor, Security settings, Simulator* ⁷
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 28.4 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 Assignable functions: Program switching, Clear error, External master image registration, SD card save cancel Output Yppe Open collector output; IMPN/FNP switchable, N.O./N.C. switchable For open collector PNP output: Maximum rating of 28.4 V, 50 mA, residual voltage of 1.5 V or less For open collector PNP output: Maximum rating of 28.4 V, 50 mA, residual voltage of 2 V or less Number of outputs 8 (OUT1 to OUT8) Function Assignable functions: Total judgment (OK/NG), Run, Busy, Ready, Strobe, Position adjustment result, Judgment ult 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 Interface compatibility Built-in Ethernet EtherNet/Ip TM , PROF INET, TCP/IP non-procedure communication EtherNet/Ip TM , PROF INET, TCP/IP non-procedure communication EtherCAT ^{RM} , CC-Link, DeviceNet TM , PROF IBUS, RS-232C ⁻³ Expanded memory 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 1o +50°C 32 to 122°F (No freezing) Relative humidity 35 to 85% RH (No condensation)	Indicators	'	PWR/ERR, OUT, TRIG, STATUS, LINK/ACT, SD
Function N1: External trigger, IN2 to IN8: Enable by assigning optional functions Assignable functions: Program switching, Clear error, External master image registration, SD card save cancel	Input	Туре	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 cur
Assignable functions: Program switching, Člear error, External master image registration, SD card save cancel Output Type Open collector NPN output shawimm rating of 26.4 V, 50 mA, residual voltage of 1.5 V or less For open collector NPN output shawimm rating of 26.4 V, 50 mA, residual voltage of 2 V or less Number of outputs Runction Enable by assigning optional functions Assignable functions: Total judgment (OK/NG), Run, Busy, Ready, Strobe, Position adjustment result, Judgment ult of each tool, Result of the logical operation of each tool, Error, SD card error Ethernet Standard 100BASE-TX/10BASE-T Connector Ru45 8-pin connector FTP client, SNTP client Interface compatibility Built-in Ethernet EtherNet/Ip TM , PROFINET, TCP/IP non-procedure communication Communication unit EtherCAT ^(B) , CC-Link, DeviceNet TM , PROFIBUS, RS-232C ^{TB} Expanded memory Ratings Power voltage Current consumption 1.8 A or less (including ripple) Current consumption Relative humidity 35 to 85% RH (No condensation)		Number of inputs	8 (IN1 to IN8)
For open collector NPN output: Maximum rating of 26.4 V, 50 mA, residual voltage of 1.5 V or less For open collector NPN output: Maximum rating of 26.4 V, 50 mA, residual voltage of 2 V or less For open collector PNP output: Maximum rating of 26.4 V, 50 mA, residual voltage of 2 V or less For open collector PNP output: Maximum rating of 26.4 V, 50 mA, residual voltage of 2 V or less For open collector PNP output: Maximum rating of 26.4 V, 50 mA, residual voltage of 2 V or less For open collector PNP output: Maximum rating of 26.4 V, 50 mA, residual voltage of 2 V or less For open collector PNP output: Maximum rating of 26.4 V, 50 mA, residual voltage of 2 V or less For open collector PNP output: Maximum rating of 26.4 V, 50 mA, residual voltage of 2 V or less For open collector PNP output: Maximum rating of 26.4 V, 50 mA, residual voltage of 2 V or less For open collector PNP output: Maximum rating of 26.4 V, 50 mA, residual voltage of 2 V or less For open collector PNP output: Maximum rating of 26.4 V, 50 mA, residual voltage of 2 V or less For open collector PNP output: Maximum rating of 26.4 V, 50 mA, residual voltage of 2 V or less For open collector PNP output: Maximum rating of 26.4 V, 50 mA, residual voltage of 2 V or less For open collector PNP output: Maximum rating of 26.4 V, 50 mA, residual voltage of 2 V or less For open collector PNP output: Maximum rating of 26.4 V, 50 mA, residual voltage of 2 V or less For open collector in the fourth output load of PNP or satisfied and part of 2 V or less For open collector in the fourth output load of PNP or satisfied and part of 2 V or less For open collector in the fourth output load of PNP or less for open collector in the fourth output load output load of PNP or satisfied and part of 2 V or less for open collector in the fourth output load of 2 V or less for open collector in the fourth output load output load of 2 V or less for open collector in the fourth output load of 2 V or less for open collector in the fourth output load of 2 V or less for open coll		Function	
Ethernet Standard Connector Ry45 8-pin connector FTP client, SNTP client Interface compatibility Built-in Ethernet Communication unit EtherCAT®, CC-Link, DeviceNet TM , PROFIBUS, RS-232C³8 Expanded memory Ratings Power voltage Current consumption Anabient was including communication unit and output load) Enable by assigning optional functions Assignable functions: Total judgment (OK/NG), Run, Busy, Ready, Strobe, Position adjustment result, Judgment unit of each tool, Error, SD card error 100BASE-TX/10BASE-T Connector RJ45 8-pin connector FTP client, SNTP client EtherNet/IP TM , PROFINET, TCP/IP non-procedure communication Communication unit EtherCAT®, CC-Link, DeviceNet TM , PROFIBUS, RS-232C³8 Expanded memory Ratings Power voltage Current consumption 1.8 A or less (including ripple) Current consumption 1.8 A or less (including communication unit and output load) Environmental resistance Relative humidity 35 to 85% RH (No condensation)	Output	Туре	For open collector NPN output: Maximum rating of 26.4 V, 50 mA, residual voltage of 1.5 V or less
Assignable functions: Total judgment (OK/NG), Run, Busy, Ready, Strobe, Position adjustment result, Judgment ult of each tool, Result of the logical operation of each tool, Error, SD card error Standard		Number of outputs	8 (OUT1 to OUT8)
Connector RJ45 8-pin connector Network function FTP client, SNTP client Interface compatibility Built-in Ethernet EtherNet/IPTM, PROFINET, TCP/IP non-procedure communication 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)		Function	Assignable functions: Total judgment (OK/NG), Run, Busy, Ready, Strobe, Position adjustment result, Judgment re
Network function FTP client, SNTP client Interface compatibility Built-in Ethernet EtherNet/IPTM, PROFINET, TCP/IP non-procedure communication Communication unit EtherCAT®, CC-Link, DeviceNet™, PROFIBUS, RS-232C® Expanded memory SD card (SD/SDHC) ® Ratings Power voltage Current consumption 1.8 A or less (including ripple) Current consumption 1.8 A or less (including communication unit and output load) Environmental resistance Ambient temperature Relative humidity 35 to 85% RH (No condensation)	Ethernet	Standard	100BASE-TX/10BASE-T
Interface compatibility Built-in Ethernet Communication unit EtherNet/IP TM , PROFINET, TCP/IP non-procedure communication EtherCAT [®] , CC-Link, DeviceNet TM , PROFIBUS, RS-232C ^{*®} 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)		Connector	RJ45 8-pin connector
Communication unit EtherCAT [®] , CC-Link, DeviceNet TM , PROFIBUS, RS-232C ^{*®} SD card (SD/SDHC) ^{*®} 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)	Network function		FTP client, SNTP client
Expanded memory Ratings Power voltage Current consumption Environmental resistance Ambient temperature Relative humidity SD card (SD/SDHC) '9 24 VDC ±10% (including ripple) 1.8 A or less (including communication unit and output load) 1.8 A or less (including communication unit and output load) 35 to 85% RH (No condensation)	Interface compatibility	Built-in Ethernet	EtherNet/IP TM , PROFINET, TCP/IP non-procedure communication
Expanded memory Ratings Power voltage Current consumption Environmental resistance Ambient temperature Relative humidity SD card (SD/SDHC) '9 24 VDC ±10% (including ripple) 1.8 A or less (including communication unit and output load) 1.8 A or less (including communication unit and output load) 35 to 85% RH (No condensation)		Communication unit	EtherCAT [®] , CC-Link, DeviceNet TM , PROFIBUS, RS-232C ^{*8}
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)	Expanded memory		
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)	Ratings	Power voltage	24 VDC ±10% (including ripple)
Relative humidity 35 to 85% RH (No condensation)			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 tb: POM, Nameplate: PC
Weight Approx. 330 g	Weight		Approx. 330 g

Color type only.

Monochrome type only.

Tools can be installed by programs.

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.

The images saved to the series amplifier can be backed up to a USB memory stick inserted into the 5 Learning mode only.

To Can also be displayed on the control panel (IV2-CP50) or the software for the IV2 Series (IV2-H1).

To Usable on the software for the IV2 Series (IV2-H1).

To When a communication unit (DL Series) is connected.

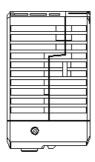


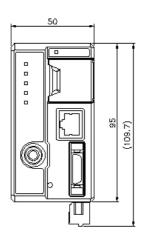
^{*9} Use only products recommended by KEYENCE.

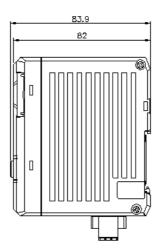


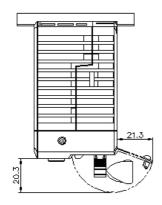
Dimensions

IV2-G30F/IV2-G30









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



