

CC-Link IE Field / CC-Link Communication Unit

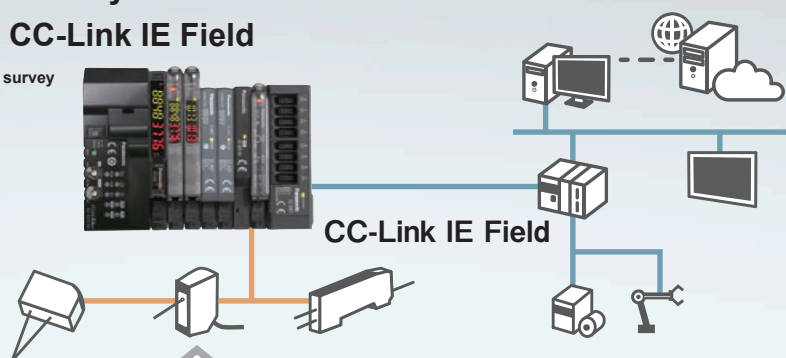
SC-GU3-04 / SC-HG1-CEF
SC-GU3-01 / SC-HG1-C



Connect Fiber Sensors and Displacement Sensors to CC-Link IE Field for High-Speed Control

Introducing the industry's first* communication units
compatible with CC-Link IE Field

* As of March 2017, in-company survey



Real-time communication for various sensors



Head-separated digital
pressure sensor
DPS-400 SERIES



Digital Fiber Sensor
FX-500 SERIES



Digital Laser Sensor
LS-500 SERIES



Micro Laser Distance
Sensor
HG-C SERIES



Rectangular-shaped
Inductive Proximity Sensor
(amplifier built-in)
GX-F/H SERIES



Compact Inductive Proximity
Sensor (amplifier-separated)
GA-311 SERIES



Micro Photoelectric
Sensor
PM SERIES



Contact-type Digital Displacement
Sensor
HG-S SERIES



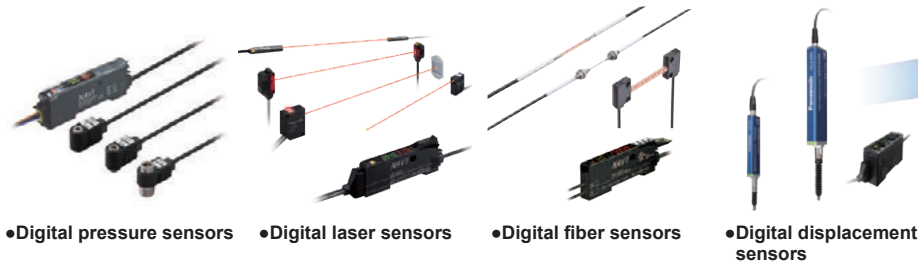
Thru-beam Type Digital
Displacement Sensor
HG-T SERIES

Visualize collected sensor data to launch IoT initiatives!

Conditions surrounding the manufacturing industry are rapidly changing as production processes are advancing dramatically based on keywords such as IoT and Industry 4.0. To respond to the IoT trend, "visualization" is the first step to take. Panasonic Industry offers sensors and communication units that achieve the acquisition and visualization of sensor data.

Panasonic Industry's sensors can connect to both!

CC-Link IE Field
CC-Link



Communication Unit for Open Network SC series

Connection of various sensors to the network

Each SC-GU3 series unit can be connected with up to 16 sensors*.

* Up to 12 units when the system is configured with FX-500 / LS-500 series

Communication unit for
CC-Link IE Field
SC-GU3-04

CC-Link IE Field

Communication speed: 1 Gbps



Communication unit for
CC-Link
SC-GU3-01

CC-Link

Communication speed: 10 Mbps (max.)



* CC-Link IE Field and CC-Link are trademarks of Mitsubishi Electric Corporation, and are controlled by the CC-Link Partner Association.

Transmission of digital (numerical) data from pressure sensors, fiber sensors, laser sensors, displacement sensors, and the like to the network

Setting of sensor threshold values and operation / confirmation of current values can be performed on the network. This eliminates the need to directly operating individual sensor units.

Head-separated digital pressure sensor

DPS-400 SERIES
DPH-100 SERIES

Units with a pressure range of 0 to +1 MPa, ±100 kPa and 0 to -101 kPa are available.

Digital fiber sensor
FX-500 SERIES

More than 100 types of fiber heads, including a heat-resistant type, chemical-resistant type and lens-equipped type, are available.



Digital laser sensor
LS-500 SERIES

Four types of sensor heads, such as a thru-beam type, coaxial reflective type and coaxial retroreflective type, are available.

Micro laser distance sensor*

HG-C SERIES

The CMOS laser sensors offer repeatability of 10 μm **0.394 mil** to ensure stable detection.



Transmission of ON/OFF data of proximity sensors and micro photoelectric sensors to the network

The ON/OFF data of sensors can be centrally managed on the network. Should an abnormality occur, the problem cause can be easily identified and located.

Compact inductive proximity sensor (amplifier-separated)

GA-311/GH SERIES

Five types of IP67G sensor head models are available, including an ultra-compact unit with a diameter of 2.8 mm **0.110 in** and a sputter-resistant unit.

Rectangular-shaped inductive proximity sensor (amplifier built-in)*

GX-F/H SERIES

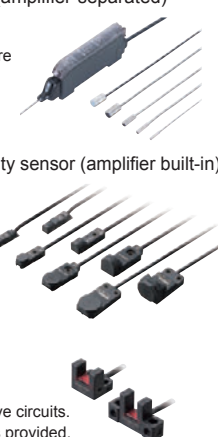
These inductive proximity sensors have a large stable detection range to provide an ample detection distance.

The integrally molded construction realizes IP68G protection.

Micro photoelectric sensor*

PM SERIES

These compact units feature three protective circuits. A large, easy-to-see multi-angle indicator is provided.



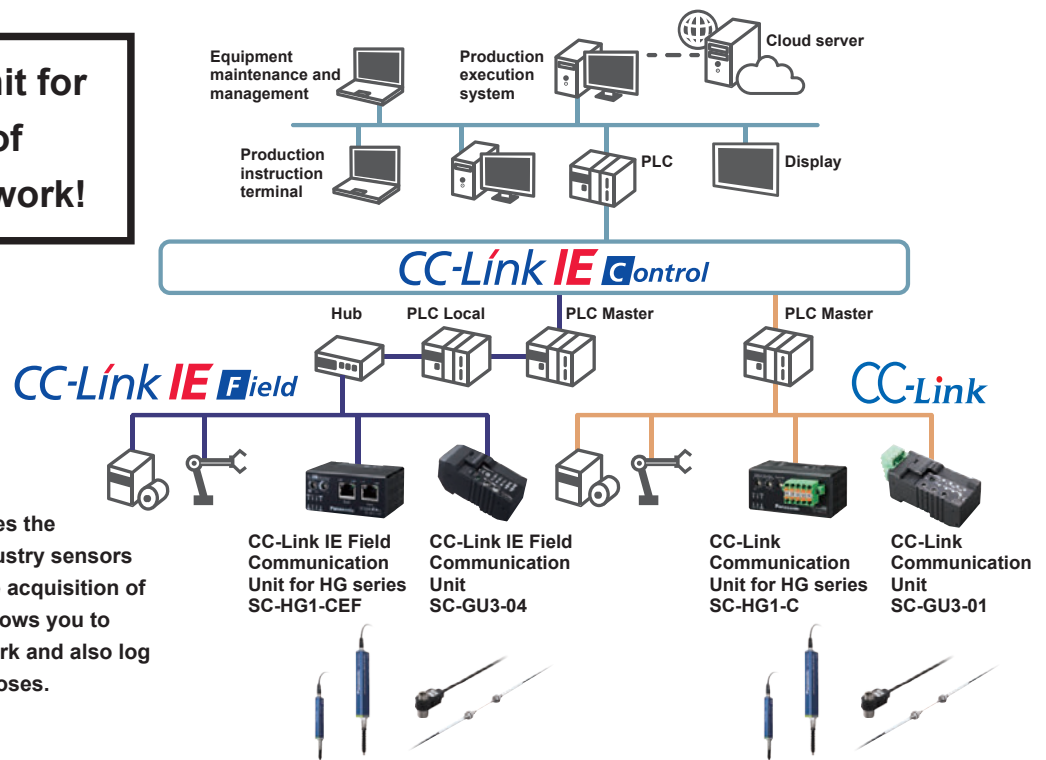
* SC-A01 analog voltage input unit or SC-A02 analog current input unit is also required.

* SC-E1 e-CON 1-channel connector input extension unit or SC-E81 / SC-E82 e-CON 8-channel connector input extension unit is also required.

Communication unit for direct connection of sensors to the network!



Use of the communication unit enables the connection of various Panasonic Industry sensors to a CC-Link network for the real-time acquisition of digital data and ON/OFF data. This allows you to change sensor settings via the network and also log data for predictive maintenance purposes.



Connection of displacement sensors to the network

Each SC-HG1 series unit can be connected with up to 15 displacement sensors.

CC-Link IE Field Communication Unit

SC-HG1-CEF

CC-Link IE Field

Communication speed: 1 Gbps

Connectable digital displacement sensors:
HG-S series, HG-T series



CC-Link Communication Unit
SC-HG1-C

CC-Link

Communication speed: 10 Mbps (max.)

Connectable digital displacement sensors:
HG-S series, HG-T series



IQSS compatible

Transmission of digital (numerical) data from digital displacement sensors to the network

The SC-HG1 series achieves programless transmission of high-precision data.
Internal settings of multiple units can also be changed in a batch via the network.



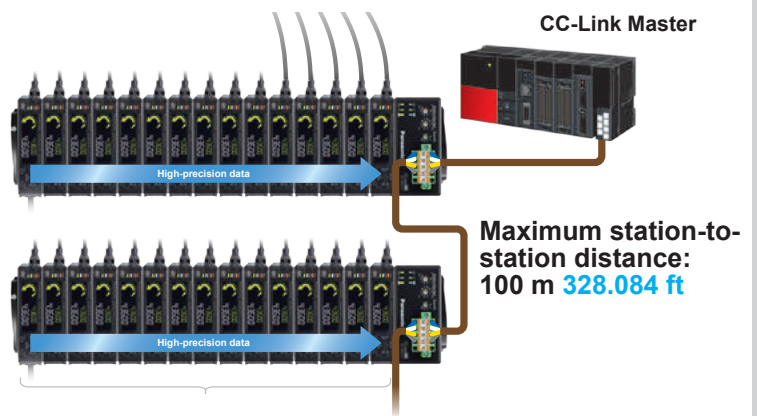
HG-S SERIES

The robust and slim unit body contributes to long service life.
The series uses the optical absolute system to eliminate the problems of "value skipping" and "missing zero point."



HG-T SERIES

The industry's highest-class* measurement accuracy is now yours.
* As a thru-beam type sensor. As of September 2023, in-company survey.



Connection of 1 master unit and up to 14 slave units

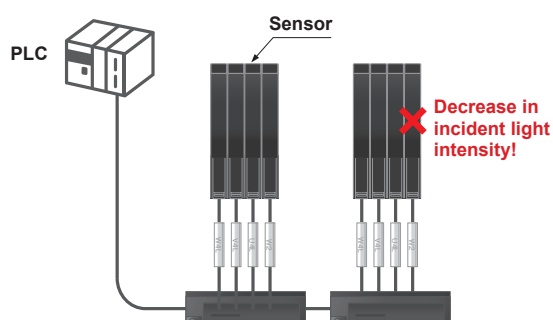
Compatible with self-monitoring function that is ideal for production lines

The HG-S / HG-T series with a self-monitoring function diagnoses its own state and notifies when readjustment of settings / setup is required or when maintenance is needed.
For more details, please refer to the catalogs of the HG-S / HG-T series.

Batch saving of sensor settings at equipment startup!

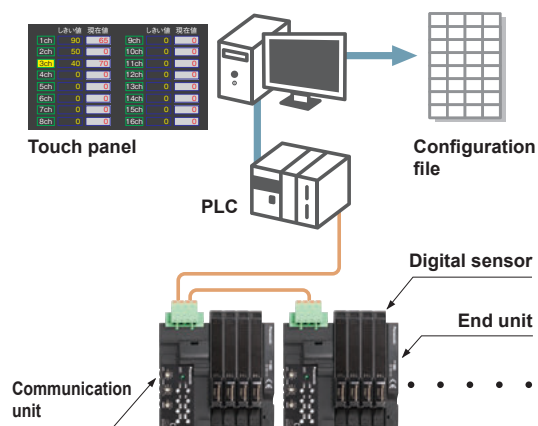
Without communication unit

When multiple sensor units are used, if one of the sensors generates a malfunction, it is necessary to check the settings of the individual sensors. This requires many man-hours.



With communication unit

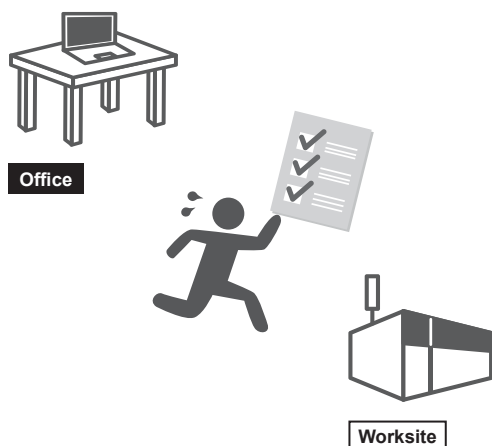
When a sensor malfunction occurs, a list of all sensor statuses is displayed, so the problem can be easily identified. By obtaining the data of the individual sensors and saving it in a settings file, system restoration work becomes easier and input / setting errors can be prevented.



Remote equipment monitoring / operation

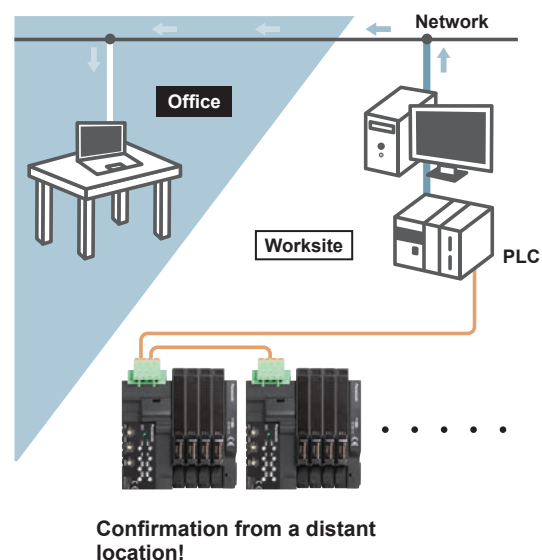
Without communication unit

When a problem occurs, it is necessary to go back and forth between the office and worksite for the confirmation of the settings and other data.



With communication unit

The communication unit connected to the existing network enables the conformation of the settings of the sensors installed in the production equipment without leaving the office. The communication unit enables quick acquisition of status information.

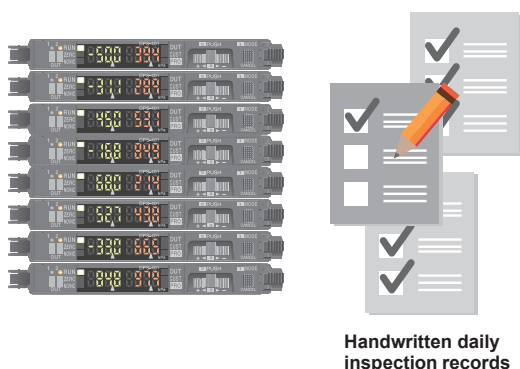


Confirmation from a distant location!

Logging of the current values of digital sensors for use in predictive maintenance!

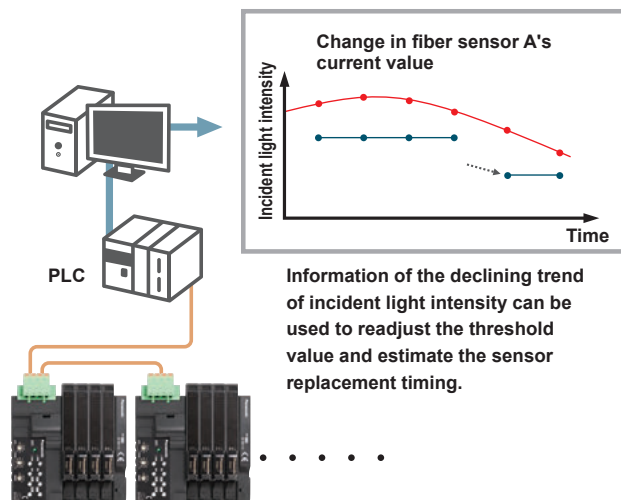
Without communication unit

It is difficult to grasp long-term sensor fluctuations only by pre-operation inspection. Manual recording of data also takes time and is cumbersome.



With communication unit

A graph plotted using obtained numerical data allows easy confirmation of the long-term fluctuation trend, thus enabling the prediction of sensor fluctuations to facilitate preventive maintenance.



Communication unit contributes to the reduction of wiring and installation work!

Without communication unit

Construction procedures

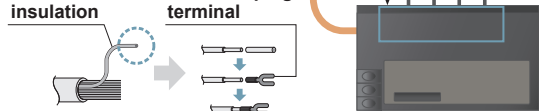
- (1) Affix mark tubes
- (2) Wiring

Construction procedures

- (1) Remove cable insulation
- (2) Crimp on terminal
- (3) Clamp screw onto terminal block
- (4) In the case of connector terminal block, process the connector for every sensor

Remove insulation

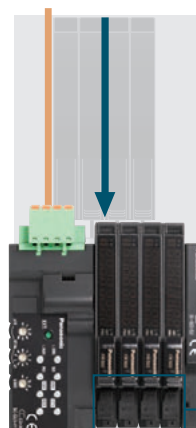
Affix crimping terminal



With communication unit

Cascade connection by connector

- No need for cable processing
- No need to clamp screw onto terminal block
- No need for mark tubes
- Easy removal without any tools
- Reduction in installation space
- No wasted material when replacing sensors



Easy replacement of a sensor without separating the adjacent sensor amplifier

*SC-GU3 series

Sensors are detachable simply by pushing down the lever of cascading connector unit and sliding the sensor amplifier sideways.





By using the SC-PC1 PC software setting, communication commands can be transmitted via the MELSEC series for the ladderless manipulation of information (including sensor data) for the SC-GU3-04 / SC-GU3-01 units connected to CC-Link.

SC-PC1 + EZSocket



* iQ Works, CC-Link, CC-Link IE Field, iQ Sensor Solution and EZSocket are registered trademarks of Mitsubishi Electric Corporation.

■List of connected devices

Station Number	Station count	Device Code	Manufacturer	Remote Input (Ri)	Remote Output (Rv)
1	1	SC-GU3 / GU3	Panasonic Industri	0000 0000	0000 0000
2					
3					
4					
5					
6					
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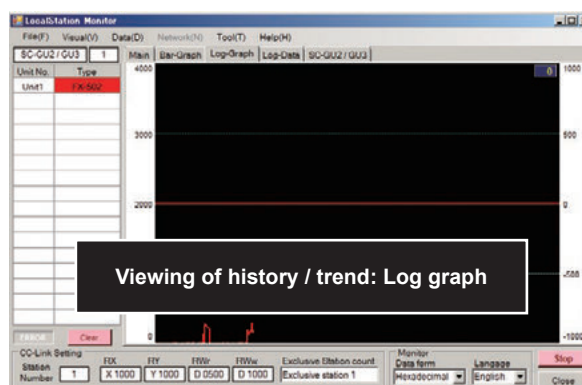
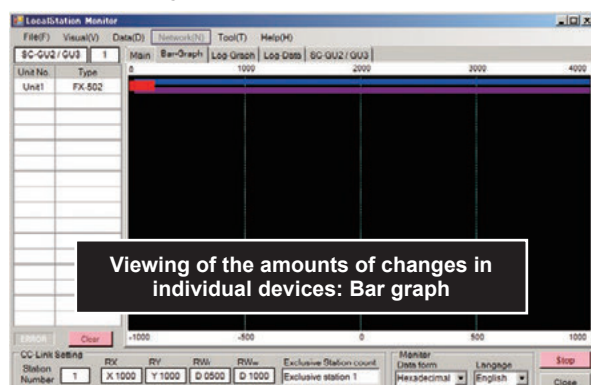
Acquisition of a list of slave units
(The numbers of stations used by other manufacturers' products are also displayed.)

■List of information about connected sensors

Unit No.	Type	Comment	Threshold1	Threshold2	Detect value	Output1	Output2	Information
Unit1	FX-502		0000	001E	0000	OFF	OFF	

Viewing of the basic data of sensors connected to SC-GU3-04 / SC-GU3-01, and change of settings

■Graph display



Sensor settings backup

The SC-PC1 software can load sensor settings information. * The loaded data can be saved in the CSV format. Furthermore, cross-checking with the settings data of sensors connected to the SC-PC1 is possible. This function is useful when you want to store the sensor settings data before sending out the devices or when you want to check the sensor settings in the event a problem occurs.

Item	Device Address	Sensor type
Device Address	X1000	
Sensor type	FX-502	
Out1 Threshold...	40	
Out1 Threshold...	40	
Out1 Output op...	0	
Out2 Threshold...	30	
Out2 Threshold...	0	
Out2 Output op...	0	
Key lock	0	
Pressure limit	0	
Response time	3	
Hysteresis	1	
Stability	2	
Emitting power	2	
Emitting level	100	
Backlit	0	
Interference pt...	0	
Adjust lock	0	
Custom mode	0	
Differential span	3	
Manual gain s...	1	
Emission	0	
Cycle	0	
Wave	0	
Record	0	
Start	0	
Algorithm	0	
Display shift	0	

Check

Save



Item	Device Address	Sensor type
Device Address	X1000	
Sensor type	FX-502	
Out1 Threshold...	40	
Out1 Threshold...	40	
Out1 Output op...	0	
Out2 Threshold...	30	
Out2 Threshold...	0	
Out2 Output op...	0	
Key lock	0	
Pressure limit	0	
Response time	3	
Hysteresis	1	
Stability	2	
Emitting power	2	
Emitting level	100	
Backlit	0	
Interference pt...	0	
Adjust lock	0	
Custom mode	0	
Differential span	3	
Manual gain s...	1	
Emission	0	
Cycle	0	
Wave	0	
Record	0	
Start	0	
Algorithm	0	
Display shift	0	

Different settings are indicated by the change of color.

Sample program for the display of data for when using PLC and display device*

The sample program enables the monitoring of digital sensors, such as incident light intensity and pressure, as well as the writing of data for the change of sensor settings.

The sample program (display screen, ladder) includes a process for the confirmation of threshold values / displayed values and the basic settings for sensor amplifiers. It facilitates the development of original programs. The display language of the sample program can be switched to Japanese or English.



Sample program for the SC-GU3-4 /SC-GU3-01

Setting screen

■Sample program for a digital fiber sensor

Setting screen



- Change threshold values and output operating settings.
- Change timer types and times.
- Setting of response time, light emitting amount level, hysteresis, etc.

Initial screen



Press the Channel Button!

- The colors of channels change according to the sensor outputs.
- A list of threshold values is displayed.
- Current values are displayed.

Graph display



Press the Graph Button!

- The change in current value is plotted, so the amount of change can be checked on the timeline.
- Data can be written to a CF card.

■Sample program for a digital pressure sensor



- Change threshold values.
- Configure sensing operation and NO / NC settings.
- Setting of response time, hysteresis, etc.

■Sample program for a digital laser sensor



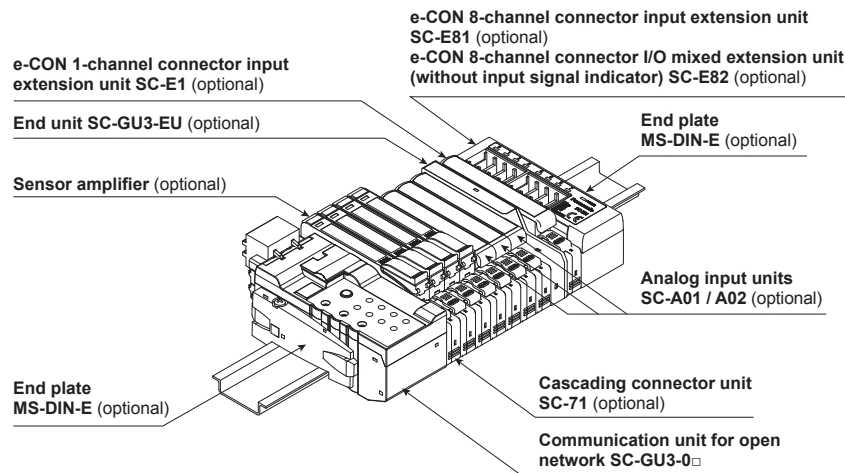
- Change threshold values and output operating settings.
- Change timer types and times.
- Setting of response time, receiving light sensitivity, hysteresis, etc.

*: The screen image is of the GOT1000 series manufactured by Mitsubishi Electric Corporation.













Display	PLC	Free downloads
GOT1000 series (Mitsubishi Electric Corporation)	Mitsubishi Electric Corporation MELSEC-Q series MELSEC-L series	Available for download from the Mitsubishi Electric and Panasonic Industry websites
GOT2000 series (Mitsubishi Electric Corporation)	Mitsubishi Electric Corporation MELSEC iQ-R series	Available for download from the Panasonic Industry website

SC-GU3-0 □ Example of System Configuration

SC-GU3-0 □



* When optical communication is used in a system connected with product models not compatible with optical communication, connect the incompatible units after the SC-GU3-EU.
A maximum of 12 units can be connected if the system is connected with a FX-500 / LS-500 series unit.
A maximum of 16 sensor amplifiers can be connected.

Designation	Appearance	Model No.	Description
Communication unit for CC-Link IE Field		SC-GU3-04	This is a communication unit, which can convert the output signal of a sensor amplifier (NPN output type) into communication data for CC-Link IE Field.
Communication unit for CC-Link		SC-GU3-01	This is a communication unit, which can convert the output signal of a sensor amplifier (NPN output type) into communication data for CC-Link.
End unit		SC-GU3-EU	This end unit can change and check the settings of sensor amplifiers (NPN output type) that allow optical communication and monitor operation status.
Cascading connector unit		SC-71	This one-touch connector is used to connect the following devices to SC-GU3-0 □ : The FX-500/550/410/300/311 fiber sensor, the LS-500/400 laser sensor, the DPS-400 digital pressure sensor, SC-E1 , SC-A01 and SC-A02 , etc.
e-CON 1-channel connector input extension unit		SC-E1	This extension unit can be connected to commercially available devices (Note) including an NPN output type or DC 2-wire type sensor. Includes power and input signal indicators (for one channel). When using in combination with the SC-GU3 series, use with the SC-71 .
e-CON 8-channel connector input extension unit		SC-E81	This extension unit can be connected to eight NPN output type devices. Includes power and input signal indicators (for eight channels).
e-CON 8-channel connector input extension unit		SC-E82	This extension unit can be connected to eight NPN output type devices. Includes a power indicator. (Does not include an input signal indicator)
Analog voltage input unit		SC-A01	This extension unit can be connected to NPN output type devices or analog voltage output type devices. When using in combination with the SC-GU3 series, use with the SC-71 .
Analog current input unit		SC-A02	This extension unit can be connected to NPN output type devices or analog voltage output type devices. When using in combination with the SC-GU3 series, use with the SC-71 .
End plate		MS-DIN-E	After SC-GU3-0 □ , a sensor amplifier, an analog input unit or an end unit are connected on a DIN rail, make sure to install the end plates in such a way that they hold the unit in place at both ends. Two pcs. per set
Computer software for CC-Link IE Field / CC-Link		SC-PC1	Through a Mitsubishi Electric Corporation PLC (MELSEC series) on a PC, it is possible to monitor sensor current values, extract setting contents in CSV format, display log data, and extract log data in CSV format. • Compatible communication units: SC-GU3-04 , SC-GU3-01 , SC-HG1-CEF , SC-HG1-C • Compatible OS: Microsoft Windows® 7 (32 bit) Japanese version • Required HDD capacity: 50 MB or more Order end date: September 30, 2024
Cable with connector on one end		CN-M20-C2	This cable has a connector for linking to the parallel output signal.

Notes: 1) Conditions of connectable DC 2-wire type input device
• Leak current: 1 mA or less (when the power is OFF), Offset voltage: 3 V or less (when the power is ON)
• Product whose load current range includes 5 to 8 mA
2) Microsoft and Windows are registered trademarks or trademarks of Microsoft Corporation in the United States.

SPECIFICATIONS

Designation	Communication unit for CC-Link IE Field
Item Model No.	SC-GU3-04
Applicable regulations and certifications	CE Marking [EMC Directive (Note 1), RoHS Directive], UKCA Marking [EMC Regulations (Note 1), RoHS Regulations]
Compatible sensor units	Sensor amplifiers (NPN output type) that can connect to the SC-71 cascading connector unit (optional)
Number of units connectable	Maximum of 16 units can be connected to one SC-GU3-04 unit (Max. 12 units when FX-500 / LS-500 series is connected)
Supply voltage	24 V DC ⁺¹⁰ / ₋₁₅ % Ripple P-P 10 % or less
Current consumption	200 mA or less (excluding connected sensor amplifiers)
Allowable passing current	2 A or less (Note 2)
Communication method	CC-Link IE Field
Remote station type	Remote device station
Network No. setting	1 to 239 (decimal) [1 to EF (hex)] (0 and 240 or higher result in an error) (Note 3)
Station No. setting	1 to 120 (decimal) (0 and 121 or higher result in an error)
Communication speed	1 Gbps
Maximum overall cable distance	100 m 328.084 ft
Ambient temperature	-10 to +50 °C +14 to +122 °F (8 to 16 units connected: -10 to +45 °C +14 to +113 °F) (No dew condensation or icing allowed) Storage: -20 to +70 °C -4 to +158 °F
Ambient humidity	35 to 85 % RH, Storage: 35 to 85 % RH
Communication cable	Ethernet cable that satisfies 1000BASE-T standard Category 5e or higher (Double-shielded / STP, straight cable) (Note 4)
Material	Enclosure: Polycarbonate
Weight	Net weight: 100 g approx., Gross weight: 150 g

Notes: 1) Ground the shield wire of the Ethernet cable at a higher-level device in order to comply with the EMC Directive on CE Marking and the EMC Regulations on UKCA Marking. This product is not provided with a grounding terminal.
For details, refer to the CC-Link IE Field Network Cable Installation Manual published by the CC-Link Partner Association.
2) Take care that the total consumption current of connected sensor amplifiers and other devices does not exceed the allowable passing current.
3) For the network number setting on this product, convert the network number to hex and set the hex value.
4) Use CC-Link Partner Association recommended cable.





Designation	Communication unit for CC-Link
Item Model No.	SC-GU3-01
Applicable regulations and certifications	CE Marking (EMC Directive, RoHS Directive), UKCA Marking (EMC Regulations, RoHS Regulations)
Compatible sensor units	Sensor amplifiers (NPN output type) that can connect to the SC-71 cascading connector unit (optional)
Number of units connectable	Maximum of 16 units can be connected to one SC-GU3-01 unit (Max. 12 units when FX-500 / LS-500 series is connected)
Supply voltage	24 V DC ⁺¹⁰ / ₋₁₅ % Ripple P-P 10 % or less
Current consumption	120 mA or less (excluding connected sensor amplifiers)
Allowable passing current	Wire-saving connector 2 A (Note 1), supply connector 6 A (Note 2)
Communication method	CC-Link Ver.1.10
Number of occupied station	Switchable 1 or 4 station
Communication speed	10 Mbps 5 Mbps 2.5 Mbps 625 kbps 156 kbps
Total extension length	100 m 328.084 ft 150 m 492.126 ft 200 m 656.168 ft 600 m 1,968.504 ft 1,200 m 3,937.008 ft
Communication cable	Specified cable (twist pair cable with shield) (Note 3)
Station No. setting	1 to 64 (0 and 65 or higher result in an error)
Remote station type	Remote device station
Ambient temperature	-10 to +55 °C +14 to +131 °F (No dew condensation or icing allowed), If 4 to 7 units are connected in cascade: -10 to +50 °C +14 to +122 °F , if 8 to 16 units are connected in cascade: -10 to +45 °C +14 to +113 °F Storage: -20 to +70 °C -4 to +158 °F
Ambient humidity	35 to 85 % RH, Storage: 35 to 85 % RH
Material	Enclosure: Polycarbonate
Weight	Net weight: 80 g approx., Gross weight: 120 g

Notes: 1) Take care that the total consumption current of connected sensor amplifiers and other devices does not exceed the allowable passing current.
2) In case of supplying power to other devices, be sure to set the current less than allowable passing current.
3) Use only a special-use communication cable that is approved by the CC-Link Partner Association.

Models that can be connected to the SC-GU3-0□

(Use in combination with **SC-71**, with the exception of certain models)


Sensors capable of communicating internal digital values (Models that support optical communications)




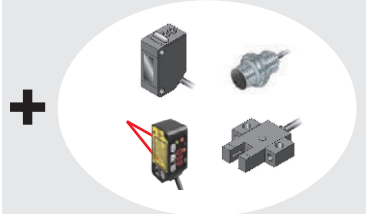
■Digital fiber sensors (NPN output type)  FX-501 FX-502	■Digital laser sensors (NPN output type)  LS-501 LS-403	■Digital pressure sensors (NPN output type)  DPS-401 DPS-402	■Analog input units  SC-A01 SC-A02
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Sensors capable of communicating output information (ON/OFF) only (No optical communications)

(Use in combination with **SC-71**, with the exception of certain models)

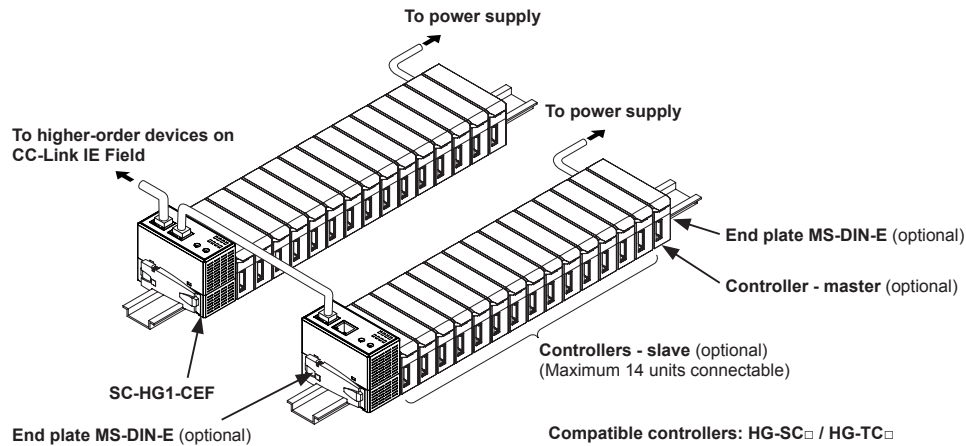
Digital fiber sensors	FX-551,FX-301(B/G/H)
Digital fiber sensors for manual setting	FX-411,FX-412,FX-311(B/G)
Digital fiber sensors for leak / liquid fiber	FX-301-F,FX-301-F7
Digital laser sensors	LS-401
Compact inductive proximity sensors	GA-311
1-channel connector input extension unit	SC-E1,SC-T1J
8-channel connector input extension unit	SC-E81
8-channel connector input extension unit (without an input signal indicator)	SC-E82

■Cascading connector unit  SC-71 Except for some models, please use in combination with the connecting connector unit SC-71 .
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■e-CON 1-channel connector input extension unit  SC-E1	■e-CON 8-channel connector input extension unit  SC-E81	■e-CON 8-channel connector input extension unit (without an input signal indicator)  SC-E82	
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SC-HG1-□ Example of System Configuration

SC-HG1-□



Designation	Appearance	Model No.	Description
CC-Link IE Field communication unit for digital displacement sensor		SC-HG1-CEF	This communication unit converts the output data from digital displacement sensors to data that can be communicated via CC-Link IE Field.
CC-Link communication unit for digital displacement sensor		SC-HG1-C	This communication unit converts the output data from digital displacement sensors to data that can be communicated via CC-Link.
End plate		MS-DIN-E	After a communication unit and controllers are connected on a DIN rail, make sure to install the end plates in such a way that they hold the unit in place at both ends. Two pcs. per set
Computer software for CC-Link IE Field / CC-Link		SC-PC1	Through a Mitsubishi Electric Corporation PLC (MELSEC series) on a PC, it is possible to monitor sensor current values, extract setting contents in CSV format, display log data, and extract log data in CSV format. • Compatible communication units (Note 1): SC-HG1-CEF, SC-HG1-C • Compatible OS: Microsoft Windows® 7 (32 bit) Japanese version • Required HDD capacity: 50 MB or more Order end date: September 30, 2024

Notes: 1) When the thru-beam type digital displacement sensor **HG-T** series is connected, it cannot be used.
2) Microsoft and Windows are registered trademarks or trademarks of Microsoft Corporation in the United States.

SPECIFICATIONS

Designation	CC-Link IE Field Communication Unit
Item	Model No.
	SC-HG1-CEF
Applicable regulations and certifications	CE Marking (EMC Directive, RoHS Directive), UKCA Marking (EMC Regulations, RoHS Regulations)
Compatible controller	HG-SC□ / HG-TC□
Number of units connectable	Maximum of 15 units (one master, 14 slaves) per SC-HG1-CEF unit
Supply voltage (Note 2)	24V DC $\pm 10\%$, including 0.5V ripple (P-P) (Note 1)
Current consumption	200 mA or less
Communication method	CC-Link IE Field
Remote station type	Remote device station
Network No. setting	1 to 239 (decimal) [1 to EF (hex)] (0 and 240 or higher result in an error) (Note 3)
Station No. setting	1 to 120 (decimal) (0 and 121 or higher result in an error)
Communication speed	1 Gbps
Transmission line types	Line, star (mixing of line and star types is possible), ring
Maximum overall cable distance	100 m 328.084 ft
Ambient temperature	-10 to +45 °C +14 to +113 °F (No dew condensation or icing allowed) Storage: -20 to +60 °C -4 to +140 °F
Ambient humidity	35 to 85 % RH, Storage: 35 to 85 % RH
Material	Enclosure: Polycarbonate
Communication cable	Ethernet cable that satisfies 1000BASE-T standard Category 5e or higher (Double-shielded / STP, straight cable) (Note 4)
Weight	Net weight: 100 g approx., Gross weight: 150 g

Notes: 1) Where measurement conditions have not been specified precisely, the conditions used were ambient temperature +20 °C [+68 °F](#).
2) Power is supplied from a connected controller / master controller.
3) For the network number setting on this product, convert the network number to hex and set the hex value.
4) Use CC-Link Partner Association recommended cable.

Designation	CC-Link Communication Unit
Item	Model No.
	SC-HG1-C
Applicable regulations and certifications	CE Marking [EMC Directive (Note 2), RoHS Directive], UKCA Marking [EMC Regulations (Note 2), RoHS Regulations]
Compatible controller	HG-SC□ / HG-TC□
Number of units connectable	Maximum of 15 units (one master, 14 slaves) per SC-HG1-C unit
Supply voltage (Note 3)	24V DC $\pm 10\%$, including 0.5V ripple (P-P) (Note 1)
Current consumption	80 mA or less
Communication method	Switchable CC-Link Ver.1.10 or 2.00
Remote station type	Remote device station
Number of occupied station	CC-Link Ver.1.10: 4 stations, CC-Link Ver.2.00: Switchable 2 or 4 stations
Station No. setting	1 to 64 (0 and 65 or higher result in an error)
Communication speed	10 Mbps 5 Mbps 2.5 Mbps 625 kbps 156 kbps
Total extension length	100 m 328.084 ft 160 m 524.934 ft 400 m 1,312.336 ft 900 m 2,952.756 ft 1,200 m 3,937.008 ft
Ambient temperature	-10 to +45 °C +14 to +113 °F (No dew condensation or icing allowed) Storage: -20 to +60 °C -4 to +140 °F
Ambient humidity	35 to 85 % RH, Storage: 35 to 85 % RH
Material	Enclosure: Polycarbonate
Communication cable	Specified cable (twist pair cable with shield) (Note 4)
Weight	Net weight: 80 g approx., Gross weight: 130 g

Notes: 1) Where measurement conditions have not been specified precisely, the conditions used were ambient temperature +20 °C [+68 °F](#).
2) If our product will be incorporated in a customer product that will comply with the EMC Directive on CE Marking and the EMC Regulations on UKCA Marking, install our product in a conductive box in accordance with "PLC User's Manual [Published by Mitsubishi Electric Corporation]".
3) Power is supplied from a connected controller / master controller.
4) Use only a special-use communication cable that is approved by the CC-Link Partner Association.

Other open-network communication units

Compatible with various sensors



DeviceNet

Communication unit for DeviceNet
SC-GU3-02

Order end date: September 30, 2024



EtherCAT

Communication unit for EtherCAT
SC-GU3-03

Compatible with displacement sensors



RS-485 Communication Unit
SC-HG1-485

* Connectable digital displacement sensors:
HG-S series, HG-T series



EtherCAT

EtherCAT Communication Unit
SC-HG1-ETC

* Connectable digital displacement sensors:
HG-S series, HG-T series

Disclaimer

The applications described in the catalog are all intended for examples only. The purchase of our products described in the catalog shall not be regarded as granting of a license to use our products in the described applications. We do NOT warrant that we have obtained some intellectual properties, such as patent rights, with respect to such applications, or that the described applications may not infringe any intellectual property rights, such as patent rights, of a third party.

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