

# Panasonic

## ideas for life

NEW

Communication Unit for EtherCAT

SC-GU3-03

CE  
Conforming to  
EMC Directive

# EtherCAT-compatible

Enables remote operation and monitoring sensors via a PC network!

**MONITORING** Enables preventative maintenance and traceability by monitoring operating conditions. **»»**  
Logging of a various sensor information

The setting of sensors can be changed via a PC.  
**«« OPERATION**  
Reduces on-site setup time and improves work efficiency.

*EtherCAT*



## ORDER GUIDE



**Communication unit for EtherCAT**  
SC-GU3-03

Main communication unit which converts the data received from any attached sensors to communication data for EtherCAT networks.



**End plate**  
MS-DIN-E

Used to fix the entire SC-GU3 stack to a DIN rail for reliable performance. Highly recommended. **2 pcs. per set**



**End unit**  
SC-GU3-EU

This end unit can change and check the settings of sensor amplifiers that allow optical communication and monitor operation status.



**Compatible installation tool for SC** **OPTION**  
SC-BUX10

Used to install SC-T8J/SC-MIL-S to the SC-GU3-03. **10 pcs. per set**



**Cascading connector unit**  
SC-71

This one-touch connector is used to connect the following devices to SC-GU3-03: The FX-500/400/300 fiber sensor, the LS-400 laser sensor, the DPS-400 digital pressure sensor, SC-T1J and SC-T1JA, etc.



**Connection cable** **OPTION**  
CN-M20-C2

Standard connector cable for linking to the parallel output signal.

EtherCAT is a registered trademark of Beckhoff Automation GmbH.  
Please refer to our website or SC-GU3 series catalog for other products.

## SPECIFICATIONS

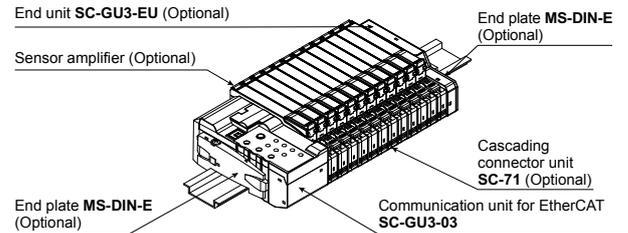
Designation	Communication unit for EtherCAT
Item	Model No.
	<b>SC-GU3-03</b>
Number of connectable units	Max. 16 units per <b>SC-GU3-03</b> (Max. 12 units for <b>FX-500</b> Series)
Supply voltage	24 V DC $\pm 10\%$ Ripple P-P 10 % or less
Current consumption	100 mA or less (excluding connected sensor amplifiers)
Allowable passing current	Wire-saving connector 2 A (Note 1)
Compliance standard	IEEE802.3u
Baud rate	100 Mbps
Communication cable	Category 5e
Internodal distance	100 m <b>328.1ft</b>
Communication ports	RJ45x2
EtherCAT communication standards	Process data communication, Mailbox communication
Ambient temperature	-10 to +55 °C <b>+14 to +131 °F</b> (No dew condensation or icing allowed), (If 4 to 7 units are connected in cascade: -10 to +50 °C <b>+14 to +122 °F</b> , if 8 to 16 units are connected in cascade: -10 to +45 °C <b>+14 to +113 °F</b> ) Storage: -20 to +70 °C <b>-4 to +158 °F</b>
Ambient humidity	35 to 85 % RH, Storage: 35 to 85 % RH
Material	Enclosure: Polycarbonate
Weight	Net weight: 75 g approx., Gross weight: 120 g approx.

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- Notes: 1) Be sure to check that total current consumption of sensor amplifiers connected in cascade does not exceed allowable passing current.  
2) EDS file can be downloaded from our website.

## SYSTEM COMPOSITION

If optical communication is to be used in a system that includes models not compatible with optical communication, connect the incompatible models after the **SC-GU3-EU**. A maximum of 12 units can be connected to the **FX-500** Series, and a maximum of 16 units can be connected to the other sensor amplifiers.



### SC-GU3-Compatible Sensors

#### Digital communication supporting sensors (optical communication compatible)

Fiber sensors	<b>FX-501, FX-502, FX-301</b> (those produced after June 2004), <b>FX-305</b>
Laser sensor	<b>LS-403</b>
Pressure sensors	<b>DPS-401, DPS-402</b>
Sensor input unit	<b>SC-T1JA</b> (in combination with <b>SC-71</b> )

#### Sensors that only output information (not optical communication compatible)

Fiber sensors	<b>FX-301</b> (those produced up to May 2004) <b>FX-301 (B/G/H), FX-301-HS</b>
Manually set fiber sensors	<b>FX-411, FX-412, FX-311 (B/G)</b>
Fiber sensors for leaks/liquid fibers	<b>FX-301-F, FX-301-F7</b>
Laser sensor	<b>LS-401</b>
Compact inductive proximity sensor	<b>GA-311</b>
1-channel connector input extension unit	<b>SC-T1J</b> (in combination with <b>SC-71</b> )
8-channel connector input extension unit	<b>SC-T8J</b> (those produced from June 2011, in combination with <b>SC-BU</b> )
8-channel connector I/O extension unit	<b>SC-TP8J</b> (those produced from June 2011, in combination with <b>SC-BU</b> )
	This unit does not contain input / output signal indicators.
Plug-in type sensor main unit	<b>SC-MIL</b> (those produced from June 2011, in combination with <b>SC-BU</b> )
Plug-in type sensor separate unit	<b>SC-MIL-S</b> (those produced from June 2011, in combination with <b>SC-BU</b> )

## DIMENSIONS (Unit: mm in)

The CAD data in the dimensions can be downloaded from our website.

