Upper Communication Unit for Digital Sensors For FX-301/305

SC-GU1-485

Related Information
■ General terms and conditions..... P.1
■ General precautions..... P.1027
■ FX-301/305..... P.139~

CE Conforming to EMC Directive

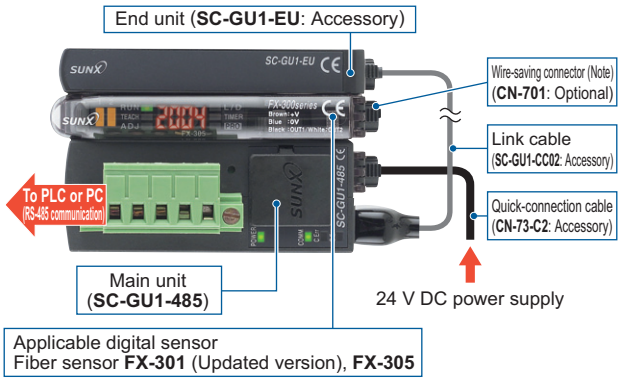
- Never use this product in a device for personnel protection.
- In case of using devices for personnel protection, use products which meet laws and standards, such as OSHA, ANSI or IEC etc., for personnel protection applicable in each region or country.

SUNX website http://www.sunx.com

Proposal of a new “management and setting” method for sensors

Control and settings can be carried out remotely

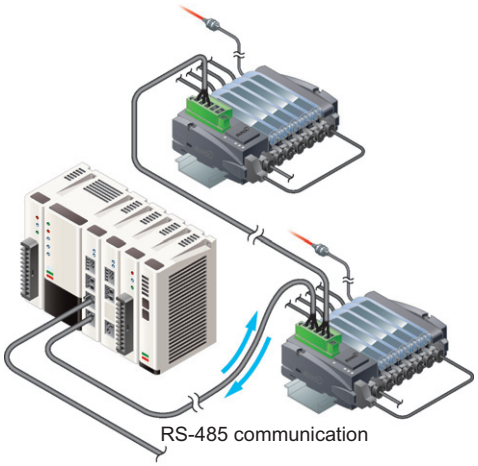
Setting and checking incident light intensity for digital sensors (**FX-301/305**) that are scattered inside and outside equipment can be carried out remotely for all sensors by using the **SC-GU1-485**, which greatly improves ease of operations such as monitoring equipment that is running and also equipment starting and maintenance.



Note: Used when the output signal is sent via a **SC-GU1-485** to the PLC. If the output signal is sent directly to the PLC, a quick-connection cable (**CN-72-C□**, **CN-71-C□**) should be used.

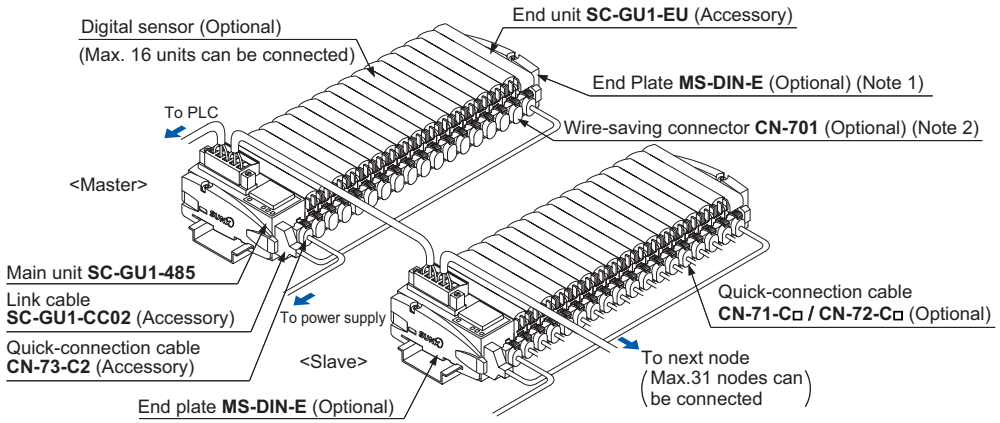
High general applicability so that any type of PLC can be used

RS-485 communication provides a high level of general compatibility so that any type of PLC can be used. Integration with existing systems is possible without the need to change PLCs.



Compatible with all PLCs equipped with RS-485 compatible units

SYSTEM CONFIGURATION



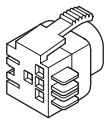
Notes: 1) End plate is not supplied with **SC-GU1-485**. Please order it separately.
2) This is used to control the output signal via signal transmission.

OPTIONS

Designation	Model No.	Description
Wire-saving connector	**CN-701**	Used when the output signal is sent via a **SC-GU1-485** to the PLC, etc.

Wire-saving connector

• **CN-701**



SPECIFICACTIONS

Item \ Type		Main unit
Model No.		**SC-GU1-485**
Applicable sensor		**FX-301**(**P**) (Note 2), **FX-305**(**P**)
Connectable units		Max. 16 units of digital sensor per **SC-GU1-485**
Connectable nodes		Max. 31 nodes
Supply voltage		24 V DC ± 10 % Ripple P-P 10 % or less
Current consumption		45 mA or less (**SC-GU1-EU**: 10 mA or less)
Communication method		2 wire half duplex method
Communication speed		57,600 bps / 38,400 bps / 19,200 bps / 9,600 bps, Selectable by DIP switch
Synchronization method		Asynchronous communication method
Electrical characteristic		Conforming to EIA RS-485
Total extension length		Communication cable: 100 m 328.084 ft or less [**SC-GU1-485** (termination) to PLC] Power supply cable: Less than 10 m 32.808 ft
Indicators	Power (POWER)	Green LED (Lights up when the power is ON)
	Communication (COMM)	Green LED (Lights up during communication)
	Upper communication error (C.Err)	Red LED [Blinks when communication error between PLC (Programmable Logic Controller) and Master or Master and Slave, or command error occurs]
	Lower communication error (S.Err)	Red LED (Blinks when communication error between the main unit and digital sensors occur)
Ambient temperature		–10 to +55 °C +14 to +131 °F (If 4 to 7 digital sensors are connected in cascade: –10 to +50 °C +14 to +122 °F, if 8 to 16 digital sensors are connected in cascade: –10 to +45 °C +14 to +113 °F) (No dew condensation or icing allowed), Storage: –20 to +70 °C –4 to +158 °F
Material		Enclosure: Heat-resistant ABS, Connector cap: silicone rubber
Weight		Net weight: 35 g approx. (**SC-GU1-EU**: 10 g approx.), Gross weight: 120 g approx.
Dimensions		**SC-GU1-485**: W25 × H41.7 × D64.5 mm W0.984 × H1.642 × D2.539 in **SC-GU1-EU**: W10 × H27 × D68.5 mm W0.394 × H1.063 × D2.697 in
Accessories		**SC-GU1-EU** (End unit): 1 pc. **CN-73-C2** [Quick-connection cable (cable length 2 m 6.562 ft)]: 1 pc. **SC-GU1-CC02** [Link cable (cable length 0.2 m 0.656 ft)]: 1 pc.

Notes: 1) Where measurement conditions have not been specified precisely, the conditions used were an ambient temperature of +20 °C +68 °F.
2) Applicable units are for the **FX-301**(**P**) after version update. Do not use the previous version of **FX-301**(**P**). The updated version of **FX-301**(**P**) has the "NAVI" printed only on single side. (See the right figure.)