

General Specifications

SNB10D Safety Node Unit (Rack Mountable Type)



GS 32S06K10-21E

■ GENERAL

This GS describes the hardware specifications of the safety node unit (SNB10D). The safety node unit is connected to the safety control unit. The safety node unit has an interface function to transmit analog input signals and contact signals from the field to the safety control unit via an ESB bus. It also has a function to supply power to I/O modules.

The safety node unit is mounted with power supply modules, ESB bus interface modules, optical ESB bus repeater modules, and I/O modules.

For details on the I/O modules, refer to the general specifications (GS 32S06K30-21E and GS 32S06K40-21E).

■ STANDARD SPECIFICATIONS

For the installation requirements standards that are common throughout the system, refer to the general specifications, "Outline of I/O Modules (GS 32S06K20-21E)."

● Number of Connectable Safety Node Units

Up to 13 safety node units can be connected to SSC60S/SSC60D safety control unit using SEC402 ESB bus coupler module.

Up to 9 safety node units can be connected to SSC50S/SSC50D/SSC10S/SSC10D safety control unit using SEC401 ESB bus coupler module.

● Power Supply Voltage

The power supply voltage is specified in the suffix codes.

- Voltage: 100 to 120 V AC and 50/60 Hz frequency
- Voltage: 220 to 240 V AC and 50/60 Hz frequency
- Voltage: 24 V DC

● Power Consumption

- 100 to 120 V AC specification: 200 VA
- 220 to 240 V AC specification: 230 VA
- 24 V DC specification: 5.5 A

● Weight

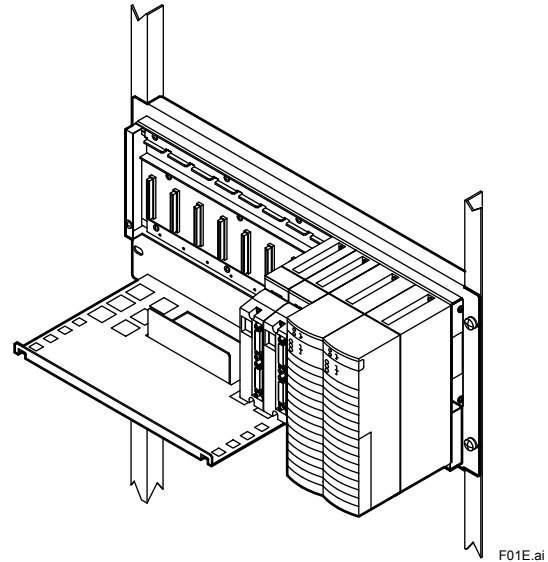
Approximately 5.9 kg

● Mounting Method

Rack mounting: Rack mount with four M5 screws
Insulation bushes (accessories) are used.

● Applicable Standards

Refer to "ProSafe-RS Safety Instrumented System Overview (GS 32R01B10-21E, GS 32S01B10-21E)."



■ CONFIGURATION

● Module Configuration

Power supply module: Supplies power to I/O module and transmitter (two modules)

The power supply terminal uses M4 screws.

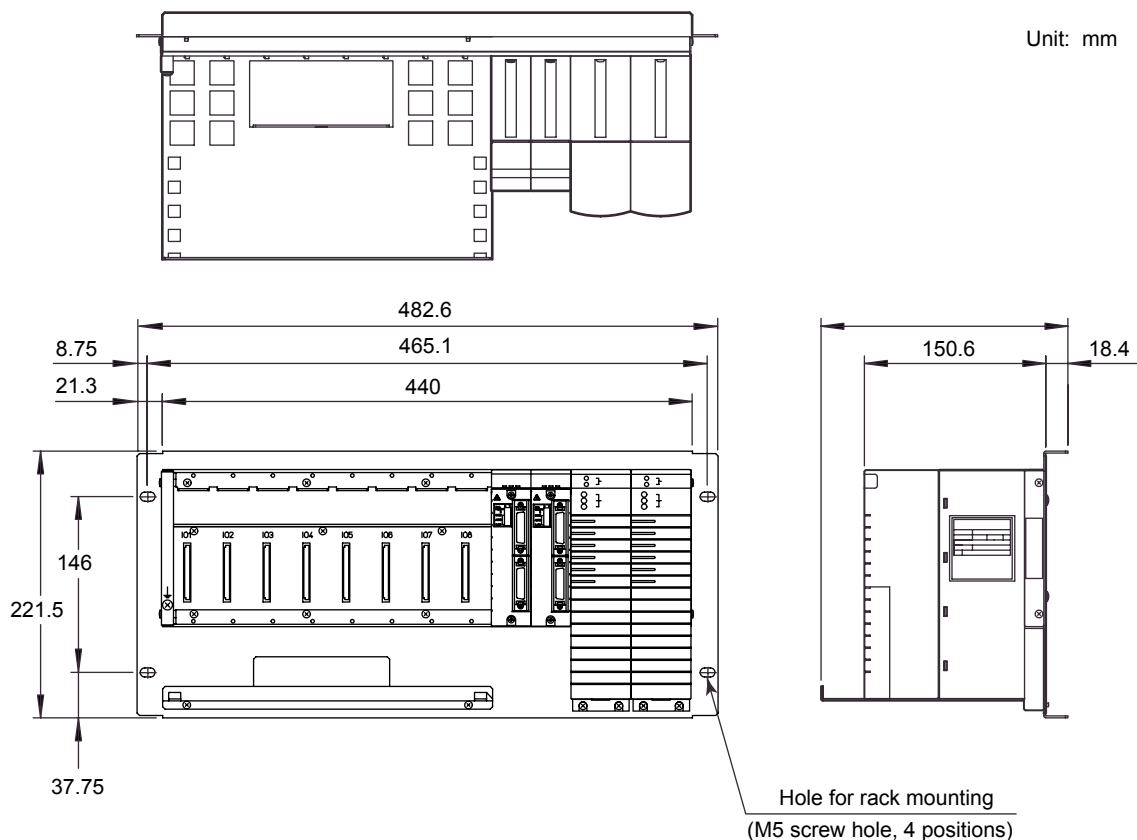
ESB bus interface module (SSB401): two modules

■ RESTRICTIONS AND CAUTIONS FOR MOUNTING

Regarding the mounting of I/O modules on the safety node unit, there are restrictions in terms of quantity and slot position. For details, refer to the "■ Restrictions and Cautions for Mounting" of "Outline of I/O Modules (GS 32S06K20-21E)."

EXTERNAL DIMENSIONS

SNB10D Safety Node Unit



F02E.ai

MODEL AND SUFFIX CODES

Safety node unit

		Description
Model	SNB10D	Node Unit for Dual-Redundant ESB Bus (19 inch Rack Mountable)
Suffix Codes	-2	Dual-redundant power supply (*1)
	1	100 to 120 V AC power supply
	2	220 to 240 V AC power supply
	4	24 V DC power supply
	3	ISA Standard G3 and temperature (-20 to 70 °C)
Option Codes	/CU2N	Connector Unit for ESB Bus [Model: S9342FA]
	/CU2T	Connector Unit with Terminator for ESB Bus [Model: S9343FA]
	/ATDOC	Explosion Protection Manual

- *1: It is possible to supply power to a transmitter.
 Note: To conform to the safety standards, the EMC conformity standards and the explosion protection standards, install the 19 inch rack mountable type devices in a keyed metallic cabinet.
 Note: Please use 1 m or longer YCB301 ESB bus cable to connect SNB10D with SSC□□□□.
 Note: Select the option code "/ATDOC" to follow the ATEX Directive for use in potentially explosive atmospheres.

Dummy cover

		Description
Model	SDCV01	Dummy cover (for I/O modules)

Note: Be sure to mount a dummy cover on a slot that is not mounted with an I/O module.

STANDARD ACCESSORIES

The safety node unit is supplied with the following accessory.

Accessory	Part number	Description	Quantity	Remark
Insulating bushing	S9049PM	SNB10D	4	Accessory

ORDERING INFORMATION

Specify the model and suffix codes.

TRADEMARKS

- ProSafe is a registered trademark of Yokogawa Electric Corporation.
- Other company and product names appearing in this document are trademarks or registered trademarks of their respective holders.