

General Specifications

Models SSC10S, SSC10D
Safety Control Units
Duplexed Safety Control Units
(for V net, Rack Mountable Type)

ProSafe-RS

GS 32Q06D30-31E

[Release 3]

■ GENERAL

This GS provides the hardware specifications of the safety control unit, which are intelligent parts of the safety control station (SCS).

■ HARDWARE SPECIFICATIONS

For the criteria for the installation environment, refer to "ProSafe-RS Safety Instrumented System Overview" (GS 32Q01B20-31E).

● Processor

MIPS R5000 Processor

● Main Memory Capacity

32 MB

● Memory Protection in case of Power Failure

Battery

Main memory protection time in case of power failure:
3 years at maximum/30°C or less (Within the battery pack lifetime (Not rechargeable))

● Temperature Adaptability

A fan unit is provided for high temperature use where the safety control units (SSC10S-F/SSC10D-F) ambient temperature exceeds 50 °C.

● Communications Interface

V net interface: Dual-redundant
ESB bus interface: Dual-redundant

● Connecting Safety Node Units

For each safety control unit, up to nine safety node units can be connected. For installation, ESB bus coupler modules (SEC401) should be mounted on 7-th and 8-th slots.

● Number of I/O Modules Mounted

Up to eight for each safety control unit
Up to 78 for each SCS

● IRIG Interface (Option)

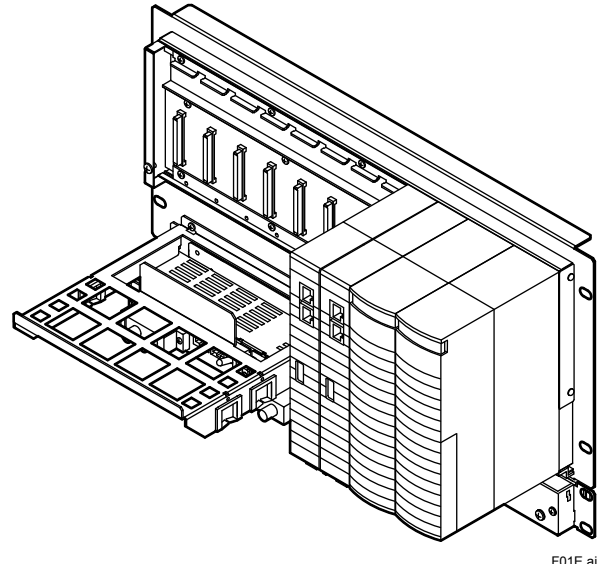
If a commercially available GPS is connected when using SOER functions of a digital input module, SCS's are synchronized with high accuracy.

Communication interface: RS-422

Time Code: IRIG-B000

Frame Time: 1 s

Bit Time: 10 ms



[Rack-mounted]

● Power Requirements

Specify suffix codes.

Voltage: 100 to 120 V AC, 50 or 60 Hz

Voltage: 220 to 240 V AC, 50 or 60 Hz

Voltage: 24 V DC

● Power Consumption

• SSC10S-S/SSC10D-S

100 to 120 V AC model: 200 VA

200 to 240 V AC model: 230 VA

24 V DC model: 5.5 A

• SSC10S-F/SSC10D-F

100 to 120 V AC model: 240 VA

200 to 240 V AC model: 290 VA

24 V AC model: 7.0 A

● Weight

Approximately 7.9 kg (for SSC10S-S)

Approximately 13.0 kg (for SSC10S-F)

Approximately 8.5 kg (for SSC10D-S)

Approximately 13.0 kg (for SSC10D-F)

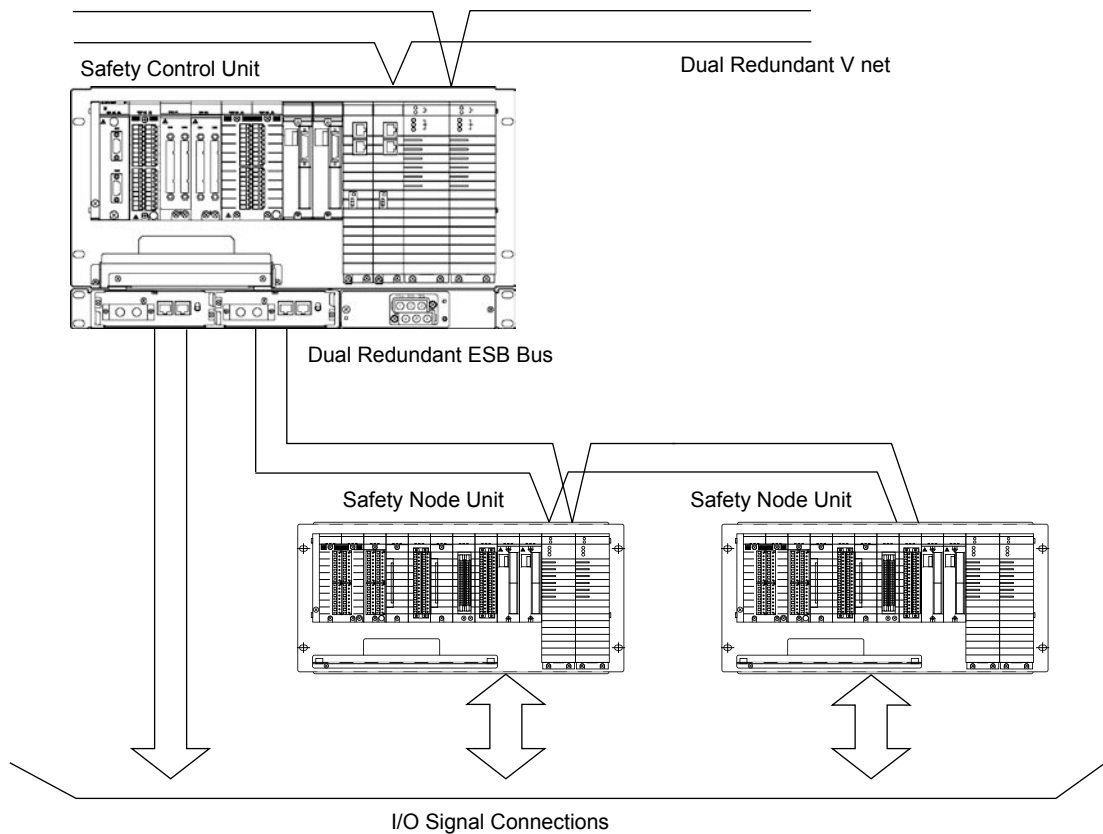
● Mounting

Rack mounting: SSC10S-S/SSC10D-S rack mounted with eight M5 screws

SSC10S-F/SSC10D-F rack mounted with twelve M5 screws

Insulating Bushing: Supplied as accessories

The SCS is composed of a safety control unit, safety node units, and an ESB bus connecting them.



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Figure SCS Configuration

● **Connections**

Power Supply: Connected with M4 screws.
Grounding: Connected with M4 screws.

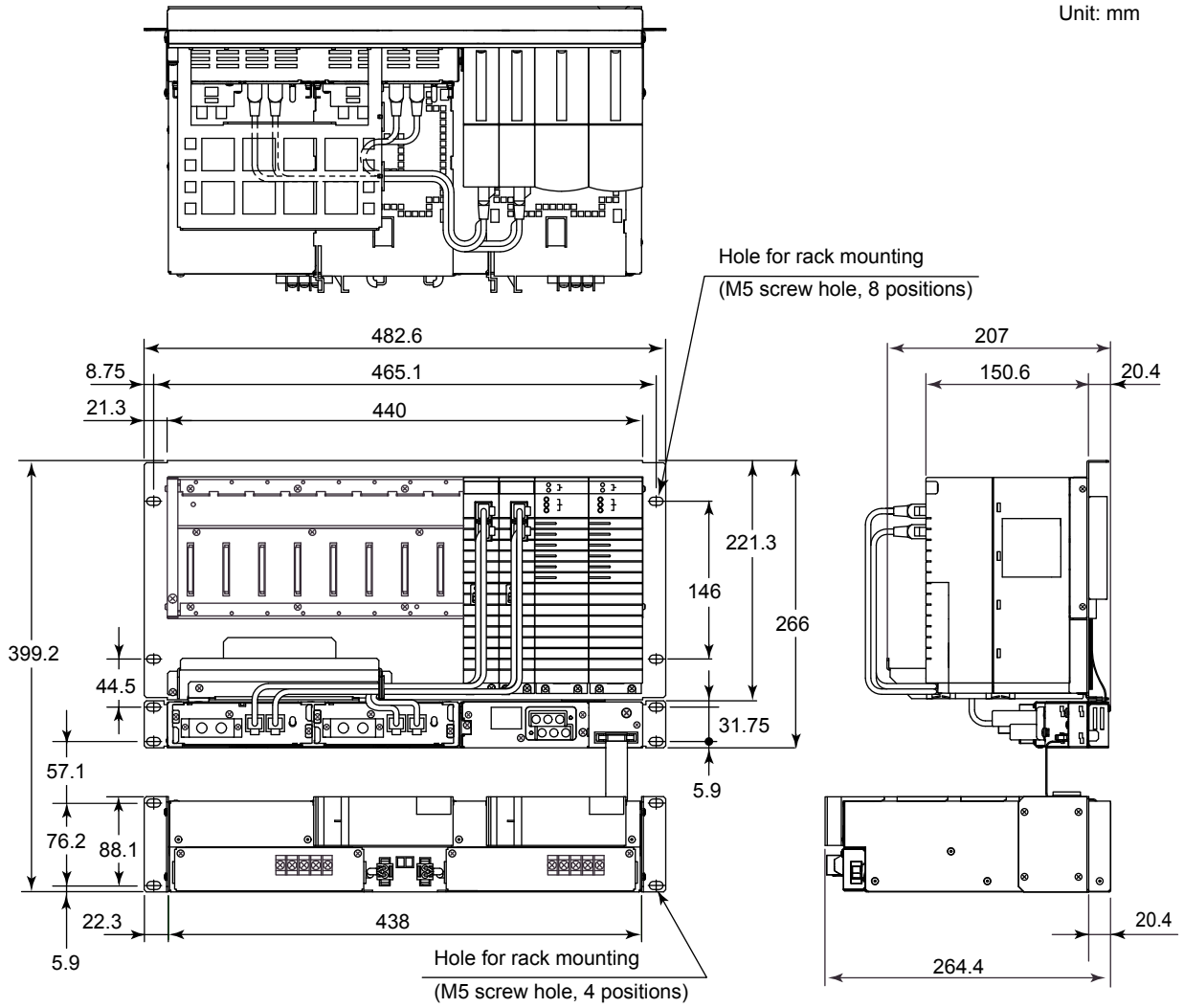
● **Applicable Standards**

Refer to "ProSafe-RS Safety Instrumented Overview (GS 32Q01B20-31E)."

EXTERNAL DIMENSIONS

- SSC10S-S, SSC10S-F, SSC10D-S, SSC10D-F

Unit: mm



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■ MODEL AND SUFFIX CODES

Safety Control Unit

		Description
Model	SSC10S	Safety Control Unit (for V net, Rack Mountable Type)
Suffix Codes	-S	Standard Type (-20 to 50 °C) (with ISA Standard G3)
	-F	Wide range temperature (-20 to 70 °C) type (with Fan unit and ISA Standard G3)
	2	Dual-redundant power supply
	5	With no explosion protection
	E	With explosion protection
	1	100 to 120 V AC power supply
	2	220 to 240 V AC power supply
	4	24 V DC power supply
Option Codes	/GPS	IRIG(GPS) interface [Part number: S9161FA]
	/ATDOC	Explosion Protection Manual

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. For details, refer to ProSafe-RS Installation Guidance (TI 32S01J10-01E).

Note: Select the option code "/ATDOC" to follow the ATEX Directive for use in potentially explosive atmospheres.

Dual-redundant Safety Control Units

		Description
Model	SSC10D	Duplexed Safety Control Unit (for V net, Rack Mountable Type)
Suffix Codes	-S	Standard Type (-20 to 50 °C) (with ISA Standard G3)
	-F	Wide range temperature (-20 to 70 °C) type (with Fan unit and ISA Standard G3)
	2	Dual-redundant power supply
	5	With no explosion protection
	E	With explosion protection
	1	100 to 120 V AC power supply
	2	220 to 240 V AC power supply
	4	24 V DC power supply
Option Codes	/GPS	IRIG(GPS) interface [Part number: S9161FA]
	/ATDOC	Explosion Protection Manual

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. For details, refer to ProSafe-RS Installation Guidance (TI 32S01J10-01E).

Note: Select the option code "/ATDOC" to follow the ATEX Directive for use in potentially explosive atmospheres.

■ SOFTWARE

The SSC10S and SSC10D require CFS1100 Safety Control Functions Package. Specify the license for CFS1100 by suffix code. For details on the CFS1100 specifications, refer to "Safety Control Functions Package (GS 32Q03B20-31E)."

■ STANDARD ACCESSORIES

The safety control unit is supplied with the following accessories.

Accessory	Part number	Description	Quantity	Remarks
Insulating bushing	S9049PM	SSC10S-S, SSC10D-S	8	Accessories
		SSC10S-F, SSC10D-F	12	
Insulation cover	T9070UQ	SSC10S, SSC10D	4	

■ ORDERING INFORMATION

Specify the model and suffix codes when ordering.

For selecting the right products for explosion protection, please refer to TI 32S01J30-01E without fail.

■ TRADEMARKS

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