

# proSense® SC6 Series Signal Conditioners

## ProSense Power Connector Unit

The SC6-PCU1 power connector unit allows easy connection of a 24 VDC / 2.5 A source to the in-rail-bus to provide power to multiple SC6 signal conditioners mounted on the rail.

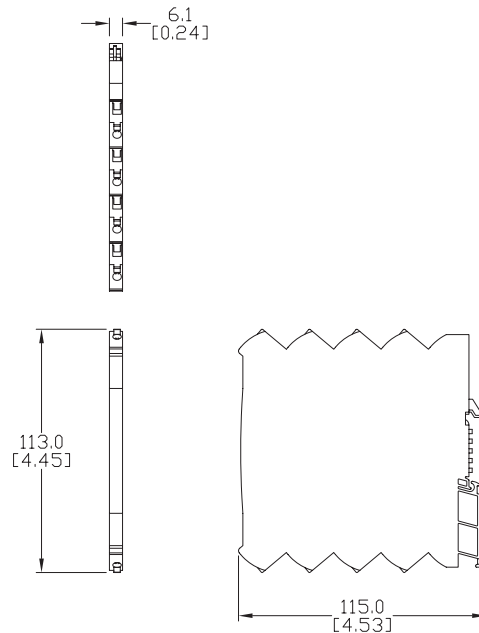


Part No.	Description	Weight (lb)	Price
<b>SC6-PCU1</b>	ProSense power connection unit, for use with SC6 series signal conditioners.	0.19	\$100.00

Power Connection Module - Technical Specifications	
Part No.	<b>SC6-PCU1</b>
Supply voltage	16.8-31.2 VDC
Internal power dissipation	0.25 W max.
Required external fuse	2.5 A

## Dimensions

mm [inches]



See our website [www.AutomationDirect.com](http://www.AutomationDirect.com) for complete Engineering drawings.

# pro<sup>sense</sup>® SC6 Series Signal Conditioners Accessories

## In-Rail-Bus

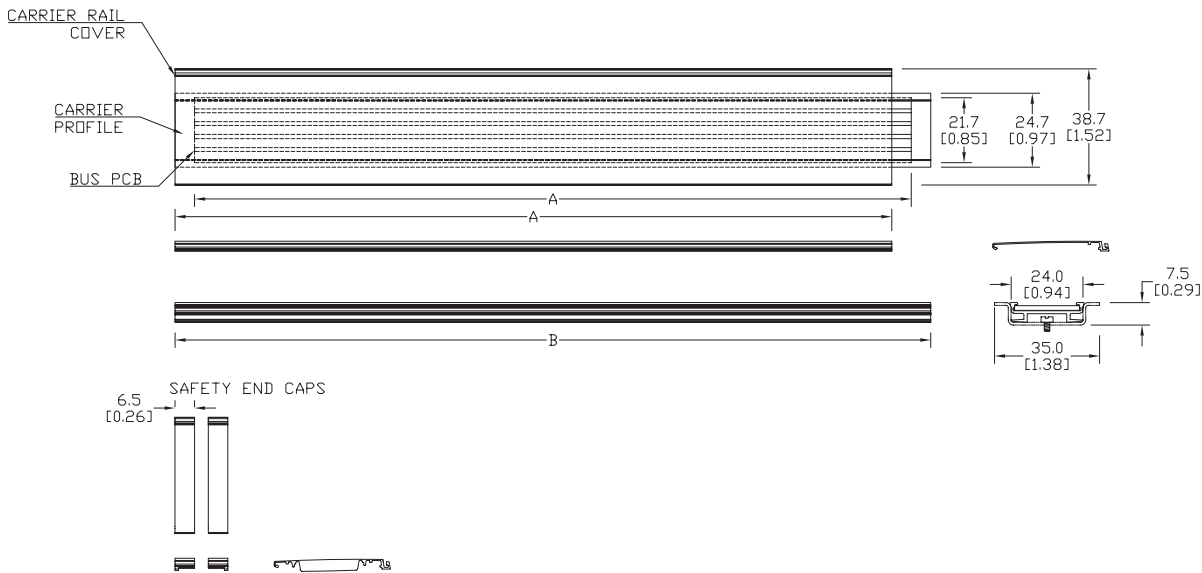


Part No.	Description	"A"	"B"	Weight (lb)	Price
<b>0068060</b>	In-rail-bus, 250mm length. For use with SC6 series signal conditioners and DN-R35S1 series DIN rail.	239mm	252mm	0.2	\$43.50
<b>0068062</b>	In-rail-bus, 750mm length. For use with SC6 series signal conditioners and DN-R35S1 series DIN rail.	739mm	752mm	0.5	\$81.00

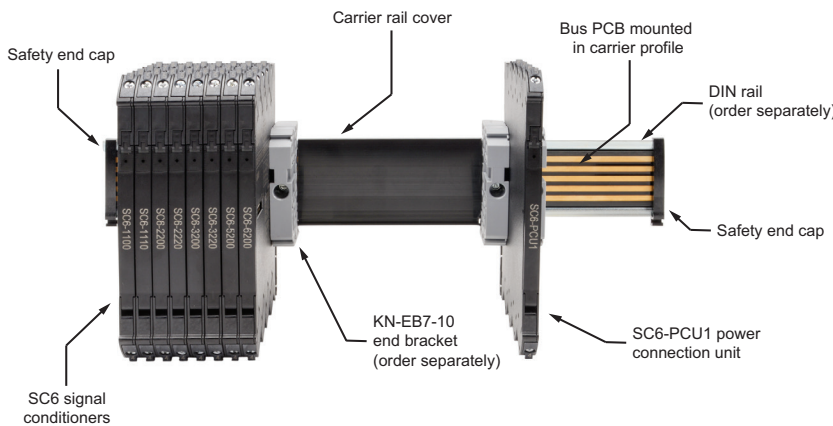
Note: Order DIN rail and signal conditioners separately

Part No.	In-Rail-Bus-Set / 250mm <b>0068060</b>	In-Rail-Bus-Set / 750mm <b>0068062</b>	Materials
<b>Each Set Includes</b>	BUS-PCB 250mm	BUS-PCB 750mm	Polyamide with copper traces
	Carrier profile 250mm	Carrier profile 750mm	
	Carrier rail cover 250mm	Carrier rail cover 750mm	Polyamide
	Safety cap right	Safety cap right	Polycarbonate
	Safety cap left	Safety cap left	Polycarbonate

## Dimensions mm [inches]



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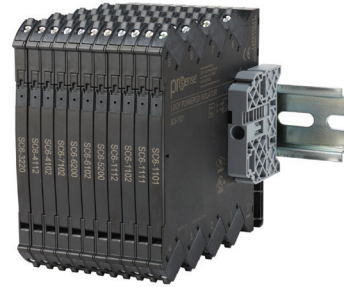
# prosense® SC6 Series Signal Conditioners

## SC6 Series Signal Conditioners

The ProSense SC6 Series of signal conditioners are housed in a narrow 6mm width package that allows for high density mounting on a 35mm DIN rail, saving panel space. Various models are available for conversion of standard DC voltage and current signals, bipolar signals, thermocouples and RTDs with isolation that eliminates ground loop problems. The SC6 Series includes single channel, two channel and signal splitter models. Depending on the SC6 Series model, power options include an in-rail power bus, loop powered output, as well as models that are powered directly from the input signal. Application specific models that have fixed configuration require no set up; DIP switch configured models provide flexibility to meet a variety of applications. All models are UL Listed as well as FM approved for use in Class 1 Division 2 hazardous locations.

## Features

- Conversion of standard DC voltage and current signals, bipolar signals, thermocouples and RTDs
- Single channel, two channel and signal splitter models
- Isolation eliminates ground loop problems
- Narrow 6mm width allows for high density mounting on a DIN rail saving panel space
- Various power options, including an in-rail power bus for certain models
- Fixed configuration or DIP switch selectable configuration for simple setup
- LED operation status on some models
- Excellent accuracy and fast response time
- Wide operating temperature range
- Suitable for high vibration environments
- UL Listed; FM approved for use in Class 1 Division 2 hazardous locations



### SC6 Series Signal Conditioner Selection Guide - Analog Signal Input Modules

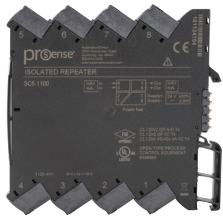
Part Number	SC6-1100	SC6-1110	SC6-2200	SC6-2220	SC6-3200	SC6-3220	SC6-1101	SC6-1111	SC6-1102	SC6-1112	SC6-4102	SC6-4112	
<b>Price</b>	\$177.00	\$216.00	\$199.00	\$238.00	\$200.00	\$247.00	\$126.00	\$181.00	\$147.00	\$217.00	\$148.00	\$217.00	
<b>Weight (lb)</b>	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	
<b>Input</b>	Current Input	X	X	X	X	X	X	X	X	X	X	-	-
	Voltage Input	-	-	X	X	X	X	-	-	-	-	-	-
	2-Wire Transmitter Input (Loop power provided)	-	-	X	X	-	-	-	-	-	-	X	X
	Bipolar Voltage/Current Input	-	-	-	-	X	X	-	-	-	-	-	-
<b>Output</b>	Current Output	X	X	X	X	X	X	X	X	X	X	X	X
	Voltage Output	-	-	X	X	X	X	-	-	-	-	-	-
	Bipolar Current Output	-	-	-	-	-	X	-	-	-	-	-	-
<b>Power</b>	2-wire, Loop Powered by Input Signal	-	-	-	-	-	X	X	-	-	-	-	
	2-wire, Loop Powered (Output Side)	-	-	-	-	-	-	-	X	X	X	X	
	4-wire, External Power (In-rail Power Bus or Terminal)	X	X	X	X	X	X	-	-	-	-	-	
<b>Application</b>	One Channel	X	-	X	-	X	-	-	X	-	X	-	
	Two Channels	-	-	-	-	-	-	X	-	X	-	X	
	One Input to Two Output Signal Splitter	-	X	-	X	-	X	-	-	-	-	-	
<b>Isolation</b>	Input / Output/ Power Isolated	X	X	X	X	X	X	X	X	X	X	X	

# proense® SC6 Series Signal Conditioners

SC6 Series Signal Conditioner Selection Guide - Temperature Input Modules					
Part Number		SC6-5200	SC6-6200	SC6-7102	SC6-6102
Price		\$181.00	\$169.00	\$159.00	\$108.00
Weight (lb)		0.27	0.27	0.27	0.27
Input	Type J/K Thermocouple Input	X	-	X	-
	Pt100 RTD Input	-	X	X	X
Output	Current Output	X	X	X	X
	Voltage Output	X	X	-	-
Power	2-wire, Loop Powered (Output Side)	-	-	X	X
	4-wire, External Power (In-Rail Power Bus or Terminal)	X	X	-	-
Application	One Channel	X	X	X	X
	Two Channels	-	-	-	-
	One Input to Two Output Signal Splitter	-	-	-	-
Isolation	Input / Output/ Power Isolated	X	X	X	-

## Unit Features

### SC6-1100



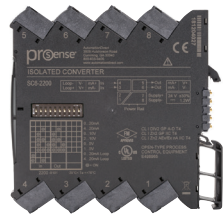
- 0-23 mA input
- 0-23 mA output (1:1 signal conversion)
- One channel
- Isolation
- 4-wire, 24VDC externally powered (terminals or in-rail power bus)
- Fixed configuration - requires no setup
- LED indication

### SC6-1110



- 0-23 mA input
- 0-23 mA output (1:1 signal conversion)
- Signal splitter – one input to two outputs
- Isolation
- 4-wire, 24VDC externally powered (terminals or in-rail power bus)
- Fixed configuration - requires no setup
- LED indication

### SC6-2200



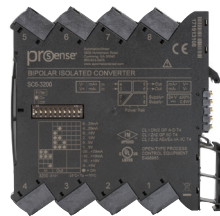
- 0-20 mA, 4-20 mA, 0-5V, 1-5V, 0-10V, 2-10V, 2-wire transmitter input
- 0-20 mA, 4-20 mA, 0-5V, 1-5V, 0-10V, 2-10V output
- One channel
- Isolation
- 4-wire, 24VDC externally powered (terminals or in-rail power bus)
- DIP switch configured
- LED indication

### SC6-2220



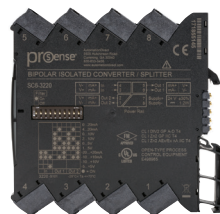
- 0-20 mA, 4-20 mA, 0-5V, 1-5V, 0-10V, 2-10V, 2-wire transmitter input
- 0-20 mA, 4-20 mA, 0-5V, 1-5V, 0-10V, 2-10V outputs
- Signal splitter – one input to two outputs
- Isolation
- 4-wire, 24VDC externally powered (terminals or in-rail power bus)
- DIP switch configured
- LED indication

### SC6-3200



- Bipolar +/-10 mA, +/-20 mA, +/-5V, +/-10V inputs
- 0-20 mA, 4-20 mA, 0-5V, 1-5V, 0-10V, 2-10V output
- One channel
- Isolation
- 4-wire, 24VDC externally powered (terminals or in-rail power bus)
- DIP switch configured
- LED indication

### SC6-3220



- Bipolar +/-10 mA, +/-20 mA, +/-5V, +/-10V inputs
- 0-20 mA, 4-20 mA, +/-10 mA, +/-20 mA, 0-5V, 1-5V, 0-10V, 2-10V outputs
- Signal splitter – one input to two outputs (or one bipolar output)
- Isolation
- 4-wire, 24VDC externally powered (terminals or in-rail power bus)
- DIP switch configured
- LED indication

# proense® SC6 Series Signal Conditioners

## Unit Features Continued

### SC6-1101



- 0-23 mA input
- 0-23 mA output (1:1 signal conversion)
- One channel
- Isolation
- Powered by input current signal
- Fixed configuration - requires no setup

### SC6-1111



- 0-23 mA input
- 0-23 mA output (1:1 signal conversion)
- Two channels
- Isolation
- Powered by input current signal
- Fixed configuration - requires no setup

### SC6-1102



- 3.5 - 23 mA input
- 3.5 - 23 mA output (1:1 signal conversion)
- One channel Isolation
- 2-wire, 6-35 VDC loop powered output
- Fixed configuration - requires no setup

### SC6-1112



- 3.5 - 23 mA input
- 3.5 - 23 mA output (1:1 signal conversion)
- Two channels
- Isolation
- 2-wire, 6-35 VDC loop powered output
- Fixed configuration - requires no setup

### SC6-4102



- 2-wire transmitter (3.5 - 23 mA) input
- 3.5 - 23 mA output (1:1 signal conversion)
- One channel
- Isolation
- 2-wire, 6-35 VDC loop powered output
- Fixed configuration - requires no setup

### SC6-4112



- 2-wire transmitter (3.5 - 23 mA) input
- 3.5 - 23 mA outputs (1:1 signal conversion)
- Two channels
- Isolation
- 2-wire, 6-35 VDC loop powered output
- Fixed configuration - requires no setup

### SC6-5200



- Thermocouple Type J, Type K input
- 0-20 mA, 4-20 mA, 0-5V, 1-5V, 0-10V, 2-10V output
- One channel
- Isolation
- 4-wire, 24VDC externally powered (terminals or in-rail power bus)
- DIP switch configured
- LED indication

### SC6-6200



- RTD Pt100 input
- 0-20 mA, 4-20 mA, 0-5V, 1-5V, 0-10V, 2-10V output
- One channel
- Isolation
- 4-wire, 24VDC externally powered (terminals or in-rail power bus)
- DIP switch configured
- LED indication

### SC6-7102



- Thermocouple Type J, Type K, RTD Pt100 input
- 4-20 mA, 20-4 mA output
- One channel
- Isolation
- 2-wire, 5.5-35 VDC loop powered output
- DIP switch configured

### SC6-6102



- RTD Pt100 input
- 4-20 mA, 20-4 mA output
- One channel
- Non-isolated
- 2-wire, 3.3-35 VDC loop powered output
- DIP switch configured