

SR250A 250mm Advanced Process Recorder Custom Configuration

1 Contents

2 Introduction	1
3 Hardware Configuration	1
4 Analog Input Configuration	2
4.1 Analog Input	2
5 Process Alarm Configuration	3
5.1 Alarm	3
6 Chart Control Configuration	3
7 Chart Record Configuration	4
7.1 Trace	4
8 Output Module Configuration	4
8.1 3-Relay Module Configuration	4
8.2 6-Relay Module Configuration	5
8.3 Hybrid Module Configuration	5
8.4 Modbus Serial Communication Module Configuration	6
9 Operator Contents Configuration	6
10 Totalizer Configuration	7
10.1 Totalizer	7
11 Datalogging Configuration	7

2 Introduction

ABB can supply custom configurations for the SR250A 250mm Advanced Process Recorder on request.

Enter the required setting or place a check mark (✓) against the relevant parameters in the following tables and return this document to the Global Sales office at Stonehouse.

3 Hardware Configuration

Number of Channels (Standard Inputs)

(✓ the number required)

3		6		9		12	
15		18		21		24	

Number of Channels (High Specification Inputs)

(✓ the number required)

6		12		18		24	
---	--	----	--	----	--	----	--

Memory Card Option (✓ the option required)

Yes	
No	

Module Options

(✓ the type of module required in each position)

Type	Position		
	E	F	G
None			
3 Relay Outputs			
6 Relay Outputs			
Digital Output + Analog Output			
Transmitter Power Supply			
Modbus Serial Communications	N/A	N/A	

4 Analog Input Configuration

Referring to Section 3.2.1 of the User Guide (IM/SR250A), enter the settings required for each of the analog inputs:

Note. This section is for 1 analog input only. To submit a custom configuration for more than 1 input, copy this section for all the other required inputs, entering its number (1 to 24) in the box provided.

4.1 Analog Input

Input Type (✓ the input type required)

Resistance Thermometer (RTD)	
Thermocouple (TC)	
Resistance (Ω)	
Voltage (V)	
Low Current (mA)	
Low Voltage (mV)	
Off (Not Analog Input 1)	

Linearizer Type (✓ the linearizer type required)

Custom	
Power 5/2	
Power 3/2	
Square Root	
Pt 100	
Type N	
Type B	
Type E	
Type L	
Type J	
Type T	
Type S	
Type R	
Type K	
Linear	

Linearizer Units (✓ the units required)

Degrees F	
Degrees C	

Electrical Input Range

(enter the electrical range values required)

Decimal Places	
Electrical Low	
Electrical High	

Engineering Input Range

(enter the engineering range values required)

Decimal Places	
Engineering Low	
Engineering High	

Engineering Units (enter the engineering units required)

Channel Tag (enter the tag required)

Broken Sensor Drive (✓ the direction for the input in the event of a broken sensor)

Upscale	
None	
Downscale	

Fault Detection Level

(enter the value of the level of fault detection required)

Filter Time

(enter the time period in seconds, between 5 and 60, over which the input values are to be averaged or enter 'Off')

5 Process Alarm Configuration

Referring to Section 3.3.1 of the User Guide (IM/SR250A), enter the settings required for each of the alarms:

Note. This section is for 1 alarm only. To submit a custom configuration for more than 1 alarm, copy this section for all the other required alarms, entering its letter (A to Z excluding I and O) in the box provided.

5.1 Alarm ☐

Alarm Type (✓ the alarm type required)

Off		Low Process		High Process	
-----	--	-------------	--	--------------	--

Alarm Source (enter a source for the alarm)

Trip Level (enter the alarm trip point value)

Hysteresis (enter a hysteresis value in engineering units)

Time Hysteresis (enter a time hysteresis value)

6 Chart Control Configuration

Referring to Section 3.4.1 of the User Guide (IM/SR250A) enter the chart control configuration settings required.

Chart Speed 1

(enter a chart speed between 0 and 1500 mm/hr)

Chart Speed 1 Source

(enter the source to initiate a change to chart speed 1)

Chart Speed 2

(enter a chart speed between 0 and 1500 mm/hr)

Chart Speed 2 Source

(enter the source to initiate a change to chart speed 2)

Chart Speed 3

(enter a chart speed between 0 and 1500 mm/hr)

Chart Speed 3 Source

(enter the source to initiate a change to chart speed 3)

Auto Print Enable (✓ the auto print mode required)

On	
Off	

Alarm Print (✓ the alarm print setting required)

On	
Off	

Alarm and Operator Message Print Speed

(✓ the print speed required)

Fast	
Slow	

Chart Cassette Type (✓ the type required)

Roll Chart	
Fanfold	

7 Chart Record Configuration

Referring to Section 3.4.3 of the User Guide (IM/SR250A), enter the settings required for each of the parameters.

7.1 Trace ☐

Primary Color (✓ the pen color required)

None	
Magenta	
Red	
Black	
Green	
Blue	
Brown	
Z-trace (traces 7 to 24 only)	

Function (✓ the function required)

Off	
Trend	

Trend Source (enter the source required)

Event	

Event Source (enter the source required)

--	--

8 Output Module Configuration

8.1 3-Relay Module Configuration

Referring to Section 3.5.1 of the User Guide (IM/SR250A), enter the settings required for each of the relays.

Relay Output 1 Source (enter the source required)

Relay Output 1 Polarity (✓ the polarity required)

Positive		Negative	
----------	--	----------	--

Relay Output 2 Source (enter the source required)

Relay Output 2 Polarity (✓ the polarity required)

Positive		Negative	
----------	--	----------	--

Relay Output 3 Source (enter the source required)

Digital Output 3 Polarity (✓ the polarity required)

Positive		Negative	
----------	--	----------	--

8.2 6-Relay Module Configuration

Referring to Section 3.5.1 of the User Guide (IM/SR250A), enter the settings required for each of the relays.

Relay Output 1 Source (enter the source required)

--	--	--	--

Relay Output 1 Polarity (✓ the polarity required)

Positive		Negative	
----------	--	----------	--

Relay Output 2 Source (enter the source required)

--	--	--	--

Relay Output 2 Polarity (✓ the polarity required)

Positive		Negative	
----------	--	----------	--

Relay Output 3 Source (enter the source required)

--	--	--	--

Relay Output 3 Polarity (✓ the polarity required)

Positive		Negative	
----------	--	----------	--

Relay Output 4 Source (enter the source required)

--	--	--	--

Relay Output 4 Polarity (✓ the polarity required)

Positive		Negative	
----------	--	----------	--

Relay Output 5 Source (enter the source required)

--	--	--	--

Relay Output 5 Polarity (✓ the polarity required)

Positive		Negative	
----------	--	----------	--

Relay Output 6 Source (enter the source required)

--	--	--	--

Relay Output 6 Polarity (✓ the polarity required)

Positive		Negative	
----------	--	----------	--

8.3 Hybrid Module Configuration

Referring to Section 3.5.2 of the User Guide (IM/SR250A), enter the settings required for each of the outputs.

Digital Output 1 Source (enter the source required)

--	--	--	--

Digital Output 1 Polarity (✓ the polarity required)

Positive		Negative	
----------	--	----------	--

Digital Output 2 Source (enter the source required)

--	--	--	--

Digital Output 2 Polarity (✓ the polarity required)

Positive		Negative	
----------	--	----------	--

Digital Output 3 Source (enter the source required)

--	--	--	--

Digital Output 3 Polarity (✓ the polarity required)

Positive		Negative	
----------	--	----------	--

Digital Output 4 Source (enter the source required)

--	--	--	--

Digital Output 4 Polarity (✓ the polarity required)

Positive		Negative	
----------	--	----------	--

Digital Output 5 Source (enter the source required)

--	--	--	--

Digital Output 5 Polarity (✓ the polarity required)

Positive		Negative	
----------	--	----------	--

Digital Output 6 Source (enter the source required)

--	--	--	--

Digital Output 6 Polarity (✓ the polarity required)

Positive		Negative	
----------	--	----------	--

Analog Output 1 Source (enter the source required)

--	--	--	--

Analog Output 1 Engineering Range

(enter the values required)

Low Value		Low mA	
High Value		High mA	

Analog Output 2 Source (enter the source required)

--	--	--	--

Analog Output 2 Engineering Range

(enter the values required)

Low Value		Low mA	
High Value		High mA	

8.4 Modbus Serial Communication Module Configuration

Referring to Section 3.1 of the Modbus Communications Option User Guide (IM/SR250-MOD), enter the settings required.

Modbus Identity (enter the identification number required from 01 to 99)

--

Baud Rate (✓ the baud rate required)

1200		2400	
4800		9600	

Parity (✓ the parity required)

Even	
Odd	
None	

Type (✓ the type required)

4 wire	
2 wire	

9 Operator Contents Configuration

Referring to Section 3.6.1 of the User Guide (IM/SR250A), ✓ the setting required.

User Language (✓ the user language required)

English	
German	
French	

10 Totalizer Configuration

Referring to Section 3.8.2 of the User Guide (IM/SR250A), enter the settings required.

Note. This section is for 1 totalizer only. To submit a custom configuration for more than 1 totalizer, copy this section for all the other required totalizers, entering its number (1 to 12) in the box provided.

10.1 Totalizer

Type (✓ the type required)

Off	
Analog	
Digital	

Source (enter the source required)

Count Rate (enter the count rate value required)

Cut Off (enter the cut off value required)

Count Direction (✓ the direction required)

Count Up		Count Down	
----------	--	------------	--

Wrap-around (✓ the setting required)

Yes		No	
-----	--	----	--

Front Panel Reset (✓ the setting required)

Yes		No	
-----	--	----	--

Reset Source (enter the source required)

Front Panel Stop/Go (✓ the setting required)

Yes		No	
-----	--	----	--

Stop/Go Source (enter the source required)

Totalizer Units (enter the units required)

Totalizer Tag (enter the tag required – 20 characters max.)

Secure Total (enter the value required)

Preset Value (enter the value required)

Predetermined Value (enter the value required)

11 Datalogging Configuration

Referring to Section 3.10.3 of the User Guide (IM/SR250A), enter the settings required.

Datalogging Filename (enter the filename required)

Number of Channels to Log

(enter the number required from 1 to 24)

Scan Interval (enter the logging interval value required)

Memory Card Channel

(enter the memory card channel required)

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