

Annunciator Panel



## Complex alarming made simple

- Superbright LEDs provide easily visible alarm indication in any lighting condition.
- Sequential Events Recorder (SER) data help identify the root cause of system problems.
- Simple wiring and configuration facilitate easy system installation.
- Reliable operation in the presence of extreme temperatures and environmental conditions maximizes alarm uptime.





## Features

#### **Local Annunciation**

Select from eight ISA-18.1 standard acknowledge sequences. The superbright LEDs make it easy to see alarm indication in any lighting condition.

#### Communications

Use up to four high-speed serial ports to communicate via DNP3, Modbus<sup>®</sup>, or SEL protocols. The SEL-2523 Annunciator Panel supports multiple sessions for all protocols.

#### **Time-Tagged Event Recording**

Time-tag alarm events to the nearest millisecond. The SEL-2523 can report time-tagged messages with DNP3 or SEL Fast SER protocols.

#### **Easy Installation**

Save time with simple wiring and configuration. You can print slide-in labels on any printer to easily update or modify the alarm labels.

#### Logic Processing

Create custom alarm conditions using programmable logic to combine inputs and communications data without costly wiring.

#### Reliability

Meet the demands of your harshest environments. The SEL-2523 exceeds stringent vibration, electrostatic discharge, electromagnetic interference, and temperature requirements.



# Event Alarming, Recording, and Analysis

Speed up repairs and troubleshooting to reduce costs and get units and processes back online. Accurate records of operations and events help you identify the root cause of system problems. Use the SEL-2523 to:

- Improve operation analysis with time-stamped records of the last 1,024 operations of 96 different internal and external events.
- Use the built-in SER to verify process sequencing, routine and emergency operations, and alarm timing.
- Receive automatic alarm messages via SEL Fast SER that are triggered by selectable events.
- Rename SER elements with custom aliases that match your system terminology and practices.

# ACSELERATOR QuickSet® SEL-5030 Software for Settings, Monitoring, and Control

QuickSet is a no-charge software package included with each SEL-2523 (or available at **selinc.com/SEL-5030**). This software offers a settings interface, event analysis tool, and remote user interface that help you:

- Save engineering time while keeping flexibility. You can communicate with the SEL-2523 through any ASCII terminal or use the graphical user interface.
- Develop settings offline with a menu-driven interface and completely documented help screens. You can speed up installation by copying existing settings files and modifying application-specific items.
- Simplify the setting procedure with the rules-based architecture to automatically check interrelated settings. The software highlights out-of-range or conflicting settings for correction.
- Quickly test and commission annunciator panels with live device status information on a software HMI screen, which you can customize for your application with changeable alarm labels and elements.
- Remotely acknowledge and reset alarms via the HMI screen.

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Device Overview	1	00 0	8 🗿   -22 🚥						
- Targets - Status - SER	SEF	ł							
- Control Window	SEL-2523 DEVICE			Date: 01/18/2008 Time: 16:25:10					
	Serial No = 2008159224								
			R100-V0-2001001	-D20080:	L15	CID = B52A			
	#	DATE	TIME		ELEMENT	STATE			
			09:51:58.0124			Asserted			
			09:51:58.0124	SV01T		Asserted			
			09:51:58.0124	SV01		Asserted			
				RB01		Deasserted			
				SV01T		Deasserted			
			09:51:58.0164			Deasserted			
			10:22:04.8598 21:20:57.0035			angea			
			14:44:55.5421			anged			
			14:45:27.3468		Settings Ch				
				RB01		Asserted			
	13	01/15/2008	14:45:41.2108	SV01T		Asserted			
	12	01/15/2008	14:45:41.2108	SV01		Asserted			
			14:45:41.2149			Deasserted			
	10			SV01T		Deasserted			
	9		14:45:41.2149		100 12003	Deasserted			
	8		10:16:55.0035						
	7		10:18:54.0035 10:53:27.1739		Fowered Up	Asserted			
	5		10:53:27.1739			Asserted			
	4			SV011 SV01		Asserted			
	3		10:54:01.8193	RB01		Deasserted			
	2		10:54:01.8233	SV01T		Deasserted			
	1	01/18/2008	10:54:01.8233	SV01		Deasserted			
	SER	To	Update SER						

Log important, user-defined system activities using the SER.

🚰 AcSELerator® QuickSet - C:\SELV	Relay.rdb - [Settings Edito	r - 2523SET (SEL	-2523 001 Setti	ings Driver)]	-	
File Edit Communications Log Tools Win	dow Help					_ & ×
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Global Settings     Device Settings	Output SELog	ic Equation	ns			1
Logic Settings     Alarm Points	OUT01 (SELogic)	-				
Alarm Points	CR_ALM				1	
-      Latch Bit Set/Reset Equations	OUT02 (SELogic)				-	
<ul> <li>SELogic Variable/Timer Settings</li> <li>Output SELogic Equations</li> </ul>	NC ALM				1	
Mirrored Bits	, -				1	
Port F Settings     Port F Settings	OUT03 (SELogic)				1	
	IRBACK					
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Port 4 Settings     DNP Map Settings	L - 0UT04				- I X	
	ALIN A1 OR ALIN E6				Accept	1
					Cancel	
	And Or Not [7]	()+-/		<	Help	
		c equation: Alarm Poin			<b>H</b>	
5EL-2523 001 Settings Driver Versio	DeviceWord Bits     Alarm Control	ACK ALIN A1	ALIN_B6 ALIN_C1	ALIN_D6 ALIN_E1	ALIN_F6 CR ALM	Equation
	Alarm Innuite	ALIN_A2	ALIN_C2	ALIN_E2	NC_ALM	quotion
TXD 🧱 RXD 🛄 Connected Direct	to Alarm Outputs	ALIN_A3 ALIN_A4	ALIN_C3 ALIN_C4	ALIN_E3 ALIN_E4	RBACK BESET	
	- Digital Inputs	ALIN_A4 ALIN_A5	ALIN_C4 ALIN_C5	ALIN_E4 ALIN_E5	SIL	
	- Digital Outputs	= ALIN AS	ALIN C6	ALIN E6	012	
	- Internal Bits	ALIN_B1	ALIN_D1	ALIN_F1		
	- Latch Bits	ALIN_B2	ALIN_D2	ALIN_F2		
	- Mirrored Bits	ALIN_B3 ALIN_B4	ALIN_D3 ALIN_D4	ALIN_F3 ALIN_F4		
	Push Buttons Remote Bits	ALIN_B5	ALIN_D5	ALIN_F5		
		~ <	-	-	>	
			11			

Simple AcSELERATOR QuickSet setting screens ease device configuration.



The configurable HMI screen aids commissioning, testing, and maintenance with live data from devices.

# **Product Overview**

Individually labeled columns and rows for easy identification



Silence, acknowledge, reset, and test pushbuttons



Front EIA-232 port for easy access to settings and status

## Optional communications card with EIA-232 or EIA-485 port



One standard EIA-232 port and one optional fiber-optic serial port for use with protocols such as SEL Fast Messaging, Modbus, and DNP3



Internal hardened power supply for 24–48 Vdc, 110–250 Vdc, or 110–240 Vac supply voltages

Standard 42 inputs and 11 contact outputs

# **SEL-2523** Specifications

General					
Front-Panel Pushbuttons	Silence, acknowledge, reset, and test pushbuttons with logic following standard ISA-18.1-1979 (R1992) sequences: A, F1A, F2M-1, F3A, M, M-1, R, and R-1				
Contact-Sensing	42 optically isolated status inputs				
Inputs	Input range options: 24, 48, 110, 125, 220, and 250 Vdc				
Contact Outputs	12 contacts, 6 A continuous carry				
Serial	One front and one rear EIA-232 ports				
Communications Ports	Optional multimode fiber-optic serial port				
	Optional rear EIA-232/EIA-485 port				
	Connectors: 9-pin female				
	Data rate: 300 to 38,400 bps				
	Protocols: SEL Fast Meter, SEL Fast SER, SEL Fast Operate, SEL MIRRORED BITS® communications, ASCII, and Modbus RTU				
	Optional protocol: DNP3 Level 2 Outstation				
Environment	-40° to +85°C (-40° to +185°F) operating temperature				
	IEEE C37.90-compliant				
	IEC 60255-compliant				
Alarm Windows	36 display windows with slide-in labels				
	Window dimensions: 32 mm H $ imes$ 70 mm W (1.25 in $ imes$ 2.75 in)				
Power Supply Options	<b>24/48 Vdc</b> Range: 19.2-52.8 Vdc				
	<b>110–250 Vdc, 110–240 Vac</b> Range: 85–264 Vac, 85–275 Vdc				
Label Generation	Print slide-in labels on any printer using the included software template				
Dimensions	Rack: 222 mm H × 483 mm W × 160 mm D (8.72 in × 19 in × 6.29 in)				
	Panel: 258 mm H $\times$ 503 mm W $\times$ 160 mm D (10.15 in $\times$ 19.8 in $\times$ 6.29 in)				



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