SEL-421-4, -5

Protection, Automation, and Control System, Standard With Serial Communication Protocols⁽¹⁾, Synchrophasor Measurement, 8 Outputs, 7 Inputs^{(2),} ACSELERATOR QuickSet[®] SEL-5030 Software⁽³⁾, and Configurable Labels

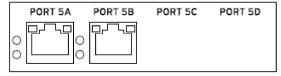
Part Number:	0	4	2	1					X			X					X
Firmware																	
Standard (Replaces SEL-421-1, -2)					4												
Standard Plus Sub-cycle Elements, Series Compensation Logic, and Full Automation (Replaces SEL-421-0,-3)					5												
Power Supply																	
24-48 Vdc						2											
48-125 Vdc or 110-120 Vac						4											
125-250 Vdc or 110-240 Vac						6											
Connector Type																	
Screw Terminal Block							1										
Connectorized® Relay ⁽¹⁰⁾ *							2										
Secondary Inputs																	
300 V Phase - Neutral Maximum (Wye), 1 A Phase								1									
300 V Phase - Neutral Maximum (Wye), 5 A Phase								5									
Ethernet Communications Pro	oto	cols	;														
None										Χ	Χ						
FTP, Telnet, Synchrophasors and DNP3										В							
FTP, Telnet, Synchrophasors, DNP3 and IEC 61850*										С							
Ethernet Connection Options																	
None										Χ	Χ				Т		
Ports 5A, 5B ⁽⁴⁾ With PTP: Ethernet Card With Two 10/100BASE-T Connectors*											1						
Ports 5A, 5B ⁽⁴⁾ With PTP: Ethernet Card With Two 100BASE-FX Connectors*											3						
Ports 5A, 5B ⁽⁴⁾ With PTP: Ethernet Card With One 10/100BASE-T, One 100BASE-FX Connector*											5						
Ports 5C, 5D ⁽⁵⁾ : Ethernet Card With Two 10/100BASE-T Connectors*											0						
Ports 5C, 5D ⁽⁵⁾ : Ethernet Card With Two 100BASE-FX Connectors*											2						
Ports 5C, 5D ⁽⁵⁾ : Ethernet Card With One 10/100BASE-T, One 100BASE-FX Connector*											4						
Mainboard Input Voltage ⁽²⁾																	
24 Vdc													1				
48 Vdc													2				

110 Vdc									3							
125 Vdc									4							
220 Vdc									5							
250 Vdc									6							
Mounting																
Horizontal Rack Mount										Н						
			-							_		_				
Horizontal Panel Mount										3		_				
/ertical Rack Mount			_					_		V		<u> </u>				
/ertical Panel Mount										4						
Chassis																
BU, Standard I/O											1	Χ	Χ	Χ	Χ	
1U, Up to One Additional I/O Board										T	2			Χ	Χ	
4U, Front Panel With 24 Target LEDs, 12 Operator Control Pushbuttons, and Tri-Color LEDs*											3			Χ	X	
5U, Up to Two Additional I/O Boards											6					
5U, Front Panel With 24 Target LEDs, 12 Operator Control Pushbuttons, and Tri-Color LEDs*											7					
:/O Board Position B For 4U o	or 5	u c	has	ssis	:											
Empty I/O Board Position										Т	Т	0	Х			
3 Independent Inputs,										÷	÷	1				
.3 Standard Form A, 2 Standard form C Outputs*												1 1				
Optoisolated Independent Level-											T	2				
Sensitive Inputs, 13 Standard Form A, 2 Standard Form C Outputs*																
24 Optoisolated Level-Sensitive											T	4				
nputs, 8 Outputs ⁽⁶⁾ *												4				
3 Independent Inputs,												5	Χ			
B High-Speed High-Current Interrupting Form A Outputs*																
8 Independent Inputs,										T	T	6	Х			
13 High-Current Interrupting Form A, 2 Standard Form C Outputs*																
3 Optoisolated Independent Level-											T	7				
Sensitive Inputs, L3 High-Current Interrupting Form A, 2 Standard Form C Outputs*																
3 Optoisolated Independent Level-												8				
Sensitive Inputs, 8 High-Speed High- Current Interrupting Form A Outputs*																
Auxiliary Trip/Close Pushbuttons, 24											3	Α				
Optoisolated Level-Sensitive Inputs, 4 High-Current Interrupting Form A																
Outputs ⁽⁸⁾ *																
Auxiliary Trip/Close Pushbuttons, 24											7	Α				
Optoisolated Level-Sensitive Inputs, High-Current Interrupting Form A Outputs ⁽⁸⁾ *																
Auxiliary Trip/Close Pushbuttons With										T	3	В				
Guards, 24 Optoisolated Level-																
Sensitive Inputs, 4 High-Current Interrupting Form A Outputs (7)(8)*																
Auxiliary Trip/Close Pushbuttons With										T	7	В				
Guards, 24 Optoisolated Level- Sensitive Inputs, 4 High-Current Interrupting Form A Outputs ⁽⁷⁾⁽⁸⁾ *											/	D				

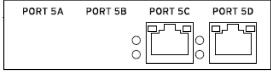
I/O Board Pos	ition B Input V	olta	ge																				
User-Settable Pickt (Available only on I/5, and 6)																			X				
24 Vdc					Τ														1				
48 Vdc					T												Т	T	2				
110 Vdc					Т												Т		3				
125 Vdc					Т	Ī	T	T				Ī	Ī	T	T		Т	T	4				
220 Vdc					Τ														5				
250 Vdc				П	Τ		Ī							Ī					6				
I/O Board Pos	ition C For 511 (`ha	cci	s 0	nlv	,																	
Empty I/O Board P					Ι.															0	Х		
8 Independent Inp 13 Standard Form Form C Outputs*	uts,															İ	İ			1	Χ		
8 Optoisolated Indo Sensitive Inputs, 1 A, 2 Standard Forn	3 Standard Form n C Outputs*																			2			
24 Optoisolated Le Inputs, 8 Outputs ⁽⁶																				4			
8 Independent Inp 8 High-Speed High Interrupting Form	-Current																			5	Χ		
8 Independent Inp 13 High-Current In 2 Standard Form C	uts, terrupting Form A,																			6	X		
8 Optoisolated Inde Sensitive Inputs, 13 High-Current In	•																			7			
2 Standard Form C				_	_												_						
8 Optoisolated Indo Sensitive Inputs, 8 Current Interruptin Outputs*	High-Speed High-																			8			
I/O Board Pos	ition C Input V	olta	ge																				
User-Settable Pickt (Available only on I/5, and 6)																					X		
24 Vdc				Т	T		T										Т				1		
48 Vdc				T	T	Ī	T	T				Ī	Ī	T	T		Т	T	Ī	Ī	2		
110 Vdc					Τ																3		
125 Vdc					T												Т				4		
220 Vdc					Τ																5		
250 Vdc					Τ																6		
Conformal Coa	t				_																		
None		Ш		-	Ļ	+	_	_	4				-	+	_	-	+	4		<u> </u>		X	
Conformally Coated	d Circuit Boards*				_																	2	
Accessories Literature																							
	Instruction Manual Set for SEL- 421-4, -5 and SEL-400 Series ⁽⁹⁾		1 4	2	1 -	ΚI		0 1]														
Wiring Harness	Wining Herrare																						
	Wiring Harness for Connectorized SEL-421 ⁽¹⁰⁾ *	Pleas	se s	ee O	nlin	е МС	о ТС	r cor	nta	ct SI	EL I	REP	or C	SR f	or o	deri	ng in	form	atior	١.			

IRIG Termination Kit (50 Ohms)* 9 1 5 9 0 0 4 9 9

- (1) Serial Protocols: SEL ASCII, CompressedASCII, Settings FileTransfer, SEL Fast Meter with Configuration, Fast Operate, Fast SER, Phasor Measurement, Enhanced Mirrored Bits® Communications, DNP3 Level 2 Server Plus Dial-Out and Virtual Terminal. (2) Mainboard Configuration has 3 High-Current Interrupting Outputs, 2 Standard Form A Outputs, 3 Standard Form C Outputs and 7 Optoisolated Level-Sensitive Inputs.
- (3) Download AcSELERATOR QuickSet SEL-5030 software for free at https://www.selinc.com/softwaresolutions/. QuickSet on CD (503001WX4) is available upon request.
- $^{(4)}$ Only two Ethernet ports will be populated based on the Ethernet Connection Options Selection. IEEE Precision Time Protocol (PTP) is only available on Port 5A and 5B.



(5) PTP is not available on Ports 5C and 5D.



- (6) 18 Common Inputs, 6 Independent Inputs, 6 High-Speed High-Current Interrupting Form A Outputs, 2 Standard Form A Outputs. (7) The guards help prevent inadvertent operation of the auxiliary Trip/Close pushbuttons. These guards may be ordered separately in a kit (part number 9252001).
- (8) Inputs: 6 Independent Level Sensitive Optoisolated and 18 Common Level Sensitive Optoisolated. Outputs: 4 High-Current Interrupting Form A Outputs.
- (9) This product comes standard with a CD manual. One complimentary instruction manual kit is available upon request with each product purchased. (10) Order a Connectorized Wiring Harness for SEL-421 (harness shipped separately).

Making Electric Power Safer, More Reliable, and More Economical ®

SEL SCHWEITZER ENGINEERING LABORATORIES, INC.

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^{*} Additional Cost