

SEL-421-7 With Sampled Values or TiDL Technology

Line Protection, Automation, Control System

Part Number:	0	4	2	1	7			X			0	0	X									XX
Firmware Standard 421 Protection plus Sub-cycle Elements, Series Compensation Logic, and Full Automation					7																	
Connector Type																						
None ⁽¹⁾ (SV Subscriber)						Χ	Χ							Е		4	-	Χ	Χ	Χ	Χ	
Screw Terminal (SV Publisher)*						1			3					D								
Connectorized®(SV Publisher)(8)*						2			3					D								
Time-Domain Link (TiDL)(2)*						R	Х									4		Χ	Χ	Χ	Χ	
Time-Domain Link (TiDL With SFPs)(2)*						Т	Χ									4			Χ			
Secondary Current Inputs None						Х	Y							Е								
1 A (SV Publisher)							1							D								
5 A (SV Publisher)							5															
,														D								
Time-Domain Link (TiDL)						R	Х															
Secondary Voltage Inputs and	Co	nfc	rn	nal	Co	at																
None									X													
None With Conformally Coated Circuit Boards ⁽³⁾ *									1													
300 V Phase Neutral With Conformally Coated Circuit Boards (SV Publisher)*									3					D								
Power Supply																						
24-48 Vdc										2												
48-125 Vdc or 110-120 Vac										4												
125-250 Vdc or 110-240 Vac										6												
Ethernet Communications Prot	oco	ols																				
FTP, Telnet, Synchrophasors, and DNP3						R	Χ							В								
FTP, Telnet, Synchrophasors, DNP3, and IEC 61850*						R								С								
FTP, Telnet, Synchrophasors, DNP3, and IEC 61850 With Sampled Values Publication*														D								
FTP, Telnet, Synchrophasors, DNP3, and IEC 61850 with Sampled Values Subscription*						Χ	Χ							Е								
Ethernet Connection Options																						
Four 10/100BASE-T Connectors ⁽⁴⁾															6							
Four 100BASE-FX Connectors ⁽⁴⁾ *															7							
Two 10/100BASE-T and Two 100BASE-															8							
FX Connectors ⁽⁴⁾⁽⁵⁾ *																						
Two 100/1000BASE and Three 100BASE SFP Ports (Order SFP															9							
Transceivers Separately) ⁽⁶⁾ *																						
Mounting																						
Horizontal Rack Mount																Н						
Horizontal Panel Mount																3						
Vertical Rack Mount															,	V						
Vertical Panel Mount																4						

Chassis																
4U, One I/O Board									4			Χ	Χ	Χ	Χ	
5U, Up to Two I/O Boards									5					Χ	Χ	
U, Up to Three I/O Boards									6							
/O Board Position B for 4U, 5U	611	CŁ	าลร	cic												
Optoisolated Independent Level-	, 00		103	313						2						
Sensitive Inputs, 13 Standard Form A, 2 Standard Form C Outputs*																
3 Optoisolated Independent Level- Sensitive Inputs, 13 High-Current										7						
nterrupting Form A, 2 Standard Form																
C Outputs* 24 Optoisolated Level-Sensitive Inputs,										4						
Standard and 6 High-Speed High-										4						
Current Interrupting Form A Outputs* 24 Optoisolated Level-Sensitive Inputs,																
Standard Form A Outputs*										D						
Optoisolated Independent Level-										8						
Sensitive Inputs, 8 High-Speed High- Current Interrupting Form A Outputs*																
/O Board Position B Input Volt	age															
4 Vdc											1					
8 Vdc											2					
10 Vdc											3					
25 Vdc											4					
20 Vdc											5					
50 Vdc											6					
/O Board Position C for 5U or (SU C	has	ssi	s												
mpty I/O Board Position												0	Χ	Х	Х	
Optoisolated Independent Level-												2				
Sensitive Inputs, 13 Standard Form A, Standard Form C Outputs*																
Optoisolated Independent Level-												7				
Sensitive Inputs, 13 High-Current																
nterrupting Form A, 2 Standard Form C Outputs*																
24 Optoisolated Level-Sensitive Inputs,												4				
Standard and 6 High-Speed High- Current Interrupting Form A Outputs*																
24 Optoisolated Level-Sensitive Inputs,												D				
3 Standard Form A Outputs*																
3 Optoisolated Independent Level- Sensitive Inputs, 8 High-Speed High-												8				
Current Interrupting Form A Outputs*																
/O Board Position C Input Volt	age															
4 Vdc													1			
8 Vdc													2			
10 Vdc													3			
25 Vdc													4			
220 Vdc													5			
250 Vdc													6			
/O Board Position D for 6U Cha	assis	0	nlv													
mpty I/O Board Position														0	Χ	
Optoisolated Independent Level- Gensitive Inputs, 13 Standard Form A, Standard Form C Outputs*														2		
3 Optoisolated Independent Level-														7		
Sensitive Inputs, 13 High-Current														/		
nterrupting Form A, 2 Standard Form C Outputs*																
24 Optoisolated Level-Sensitive Inputs,														4		

24 Optoisolated Level-Sensitive Inputs, 8 Standard Form A Outputs*								D	
8 Optoisolated Independent Level-								8	
Sensitive Inputs, 8 High-Speed High- Current Interrupting Form A Outputs*									

I/O Board Position D Input Voltage

24 Vdc	1
48 Vdc	2
110 Vdc	3
125 Vdc	4
220 Vdc	5
250 Vdc	6

Accessories

Literature		
	Instruction Manual for SEL-421-7 and SEL-400 Series ⁽⁷⁾	PM421-KT-02
Wiring Harness		
	Wiring Harness for Connectorized SEL-421 ⁽⁸⁾ *	Please see Online MOT or contact SEL REP or CSR for ordering information.

^{*} Additional Cost

- (1) Sampled values subscriber relays have no analog input boards and instead receive voltages and currents via Ethernet.
- (2) Not compatible with Axion based TiDL systems.
- $^{(3)}$ Conformal coat applies to remaining boards in the relay.
- (4) IEEE Precision Time Protocol (PTP) is available on Ports 5A, 5B.
- (5) Ports 5A and 5C are dedicated as 100BASE-FX and Ports 5B and 5D are dedicated as 10/100BASE-T.
- (6) IEEE Precision Time Protocol (PTP) and IEC Parallel Redundancy Protocol (PRP) are available on the process and station bus ports. Two independent IP addresses are available: one for the station bus and one for engineering access. See the instruction manual or selinc.com/products/sfp/ for a list of compatible SFP transceivers.
- (7) This product comes standard with a CD manual. One complimentary printed instruction manual is available upon request with each product purchased.

 (8) 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.

2350 NE Hopkins Court - Pullman, WA 99163 USA Phone: +1.509.332.1890 - Fax: +1.509.332.7990