

SE7441

Electrical Safety Analyzer

The SE 7441 Compact 4-in-1 Safety Analyzer combines cutting-edge safety features into one versatile device. With advanced ARC detection, precise ground bond measurements, and true negative voltage capabilities. Streamline your testing with one-click scanning, which simultaneously checks multiple points across up to 16 channels, boosting efficiency for multi-functional products. Ideal for today's industrial environments, the SE 7441 features a user-friendly 4.3-inch touch panel and barcode data scanning, simplifying operations and maximizing productivity.



Key Highlight

- True Negative Voltage Insulation Resistance Technology (optional).
- Highly flexible and programmable testing parameters.
- Intuitive and user-friendly touch panel operation.
- EEC exclusive patent right on fast discharge function to help DUT expeditiously releases any excess electricity within 50ms.
- Compact 2U(89mm) design to save the testing spaces.
- Unmatched quality assurance with ARC detection capability eliminates poor gap spacing that can cause dielectric breakdowns.
- Built-in scanners up to 16 channel (optional).
- Provided with barcode interface, users can scan and capture data directly without connecting to a computer.

Safety and Productivity

Features



DualCHEK



VERICHEK



External Scanner



Fast Discharge



ARC Detection



Smart GFI



Ramp High



Charge Low

EEC Benefits



APAC Only

Available Interface



USB



RS-232



LAN (OPT)



GPIB (OPT)



Specifications – SE7441 (APAC Only)

SE Series		
MODEL		SE 7441
INPUT		
Voltage (AC)		200-240V±10%
Apparent Power		600VA
Frequency		50/60Hz ± 5%
AC WITHSTAND VOLTAGE		
Output Rating (AC)		5kV/40mA
Output Voltage Range		0-5.00kV
Voltage Resolution		0.01kV
Voltage Accuracy		±(1% of setting + 0.5% of Range)
Current Measurement Range (Total)		0.000-40.00mA
Current Resolution (Total)		0.001/0.01/0.1mA
Current Accuracy (Total)	0.000-4.000mA	±(2% of reading + 3 counts)
	3.50-100.0mA	±(2% of reading + 6 counts)
Current Measurement Range (Real)		0.000-40.00mA
Current Resolution (Real)		0.001/0.01mA
Current Accuracy (Real)	0.000-9.999mA	±(3% of reading + 50uA), All Ranges PF > 0.1, V > 250Vac
	10.00-99.99mA	
Output Frequency		50/60Hz ± 0.1%
Ramp Up Timer		0.1-999.9s
Ramp Down Timer		0.0-999.9s
Dwell Timer	Auto Range	0, 0.2-999.9s (0=continuous)
	Fixed Range	0, 0.1-999.9s (0=continuous)
Timer Resolution		0.1s
Timer Accuracy		±(0.1% of setting + 0.05s)
Output Waveform		Sine Wave, Crest Factor = 1.3-1.5
Output Regulation		±(1% of output + 5V), From no load to full load
Current Offset		0.000-40.00mA (Total current + current offset ≤ 40mA)
Arc Detection		The range is from 1-9 (9 is the most sensitive)
DC WITHSTAND VOLTAGE		
Output Rating (DC)		6kV/10mA
Output Voltage Range		0-6.00kV
Voltage Resolution		0.01kV
Voltage Accuracy		±(1% of setting + 0.5% of Range)
Current Measurement Range		0.0nA-10mA
Current Resolution		0.1nA/0.001uA/0.01uA/0.1uA/0.001mA/0.01mA
Current Accuracy	0.0-400.0nA	±(2% of reading + 10 counts) Low Range is ON.
	0.350-4.000uA	
	3.50-40.00uA	
	35.0-400.0uA	±(2% of reading + 2 counts)
	0.300-4.000mA	
	3.50-10.00mA	
Output Ripple		< 4% (6kV/10mA at Resistive Load)
Ramp Up Timer	Low range = OFF	0.4-999.9s
	Low range = ON	0.5-999.9s

Specifications – SE7441 (APAC Only)

MODEL		SE 7441
DC WITHSTAND VOLTAGE		
Ramp Down Timer		0.0, 1.0-999.9s
Dwell Timer		0, 0.4-999.9s (0=continuous)
Timer Resolution		0.1s
Timer Accuracy		±(0.1% of setting + 0.05s)
Charge Low Current		0.0-350.0uA
Discharge Timer		< 50ms for no load, < 100ms for capacitor load (all capacitance values in max load spec below)
Maximum Capacitive Load		1μF < 1kV, 0.75μF < 2kV, 0.5μF < 3kV, 0.08μF < 4kV, 0.04μF < 5kV, 0.015uF < 6kV
Current Offset		0.0-10mA (Total current + current offset ≤10mA)
Arc Detection		The range is from 1-9 (9 is the most sensitive)
INSULATION RESISTANCE		
Output Rating (DC)		6kV/50GΩ
Output Voltage Range		10-6000V
Voltage Resolution		1V
Voltage Accuracy		±(1% of setting + 0.5% of Range)
Resistance Measurement Range		0.100MΩ-50GΩ
Resistance Resolution		0.001/0.01/0.1/1MΩ
Resistance Accuracy	0.05-999.9MΩ under 10-29V	±(15% of reading + 2 counts)
	0.05-999MΩ under 30-499V	±(7% of reading + 2 counts)
	0.100-999.9MΩ under 500-6kV	±(2% of reading + 2 counts)
	1G-9.999GΩ under 500-6kV	±(5% of reading + 2 counts)
	10G-50GΩ under 500-6kV	±(15% of reading + 2 counts)
Ramp Up Timer		0.1-999.9s
Ramp Down Timer		0.0, 1.0-999.9s
Dwell Timer		0, 0.5-999.9s (0 = continuous)
Delay Timer		0.5-999.9s
Timer Resolution		0.1s
Timer Accuracy		±(0.1% of setting + 0.05s)
Charge Low Current		0.000-3.500μA
GROUND BOND		
Output Rating (AC)		32A/600mΩ/8V
Output Current		1.00-32.00A
Current Resolution		0.01A
Current Accuracy		±(2% of setting + 0.5% of range)
Output Voltage		3.00-8.00V
Voltage Resolution		0.01V
Voltage Accuracy		±(2 % of setting + 3 counts) O.C.
Lead Resistance Offset		0-200mΩ
Resistance Measurement Range		0-600mΩ
Resistance Resolution		1mΩ
Resistance Accuracy		±(2 % of reading + 2 counts)
Dwell Timer		0, 0.5-999.9s (0 = continuous)
Timer Resolution		0.1s
Timer Accuracy		±(0.1% of setting + 0.05s)

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MODEL		SE 7441
CONTINUITY (Optional)		
Output Rating (DC)		1A for 1.000Ω, 0.1A for 10.00Ω, 0.01A for 100.0Ω, 0.001A for 1kΩ, 0.0001A for 10kΩ
Resistance Offset		0.000-10.00Ω,
Resistance Measurement Range		0.000-10kΩ
Resistance Resolution		0.001/0.01/0.1/1/1Ω
Resistance Accuracy	0.000 -1.000Ω	±(1% of reading + 3 counts)
	1.01-10.00Ω	
	10.1-100.0Ω	
	101-1kΩ	
	1.001k-10kΩ	
Dwell Timer		0.0, 0.4-999.9s (0 = continuous)
Timer Resolution		0.1s
Timer Accuracy		± (0.1% of setting + 0.05s)
GENERAL		
Remote Input Signal		Test, Reset, Interlock, Recall File 1 through 15
Remote Output Signal		Pass, Fail, Test-in-Process
Memory		2000 steps, Allow the user create different memories and steps. But each memory limit max. 200 steps and results
Display		4.3" Color Display (Touch Panel)
Interface ⁴		Standard USB & RS232, Optional Ethernet, GPIB
Voltage Resolution		0.01V
Built-in Scanner Module		Yes
External Scanner port		Yes
Language		English/Traditional Chinese/Simplified Chinese
Op./Non-Op. Temp./Humidity		0 to 40°C/-40 to 75°C/20 to 80%RH
Dimension (W × H × D), mm		430 × 133 × 400
Weight		20kg
INBOX ACCESSORIES		

Power Cable (10A for SE 7430, SE 7440 & SE 7441; 15A for SE 7451 & SE 7452)*1; Fuse*1; 1101 Hipot Output Lead - Alligator Clip*1 & 1102 Hipot Return Lead - Alligator Clip*1 for SE 7430 & SE 7451; 1137 Ground Bond Output Lead - Alligator Clip (40A)*1 & 1138 Ground Bond Return Lead - Alligator Clip (40A)*1 for SE 7440, SE 7441 & SE 7452; 1109 Hipot Output Lead - Pin Connector*8 for SE 7441; 1224 USB Cable*1; 1505 Interlock Disable Key*1; USB Disk*1; Hook Terminal*20 for SE 7441

Subject to change without prior notice.