WHALETEQ Test Solutions for Medical Device Manufacturers

Trouble-Free Compliance

Comprehensive IEC 60601-2-27 Testing Package

Save time on studying the medical standard and training by completing all required ECG in Patient Monitor performance testing with just a few clicks.

Package Contents

Simulator & Tester

Ⓐ **SECG 5.0 AIO** Multi Vital Sign Simulator includes IEC 60601-2-27 Assistant Software

Ⓑ **CMRR 3.0+** Common Mode Rejection Ratio Tester includes IEC 60601-2-27 Assistant Software

Accessories

1. Compound Terminal x 23
2. Grounding Wire x 2
- RCA to BNC Cable x 1
- USB Cable x 1

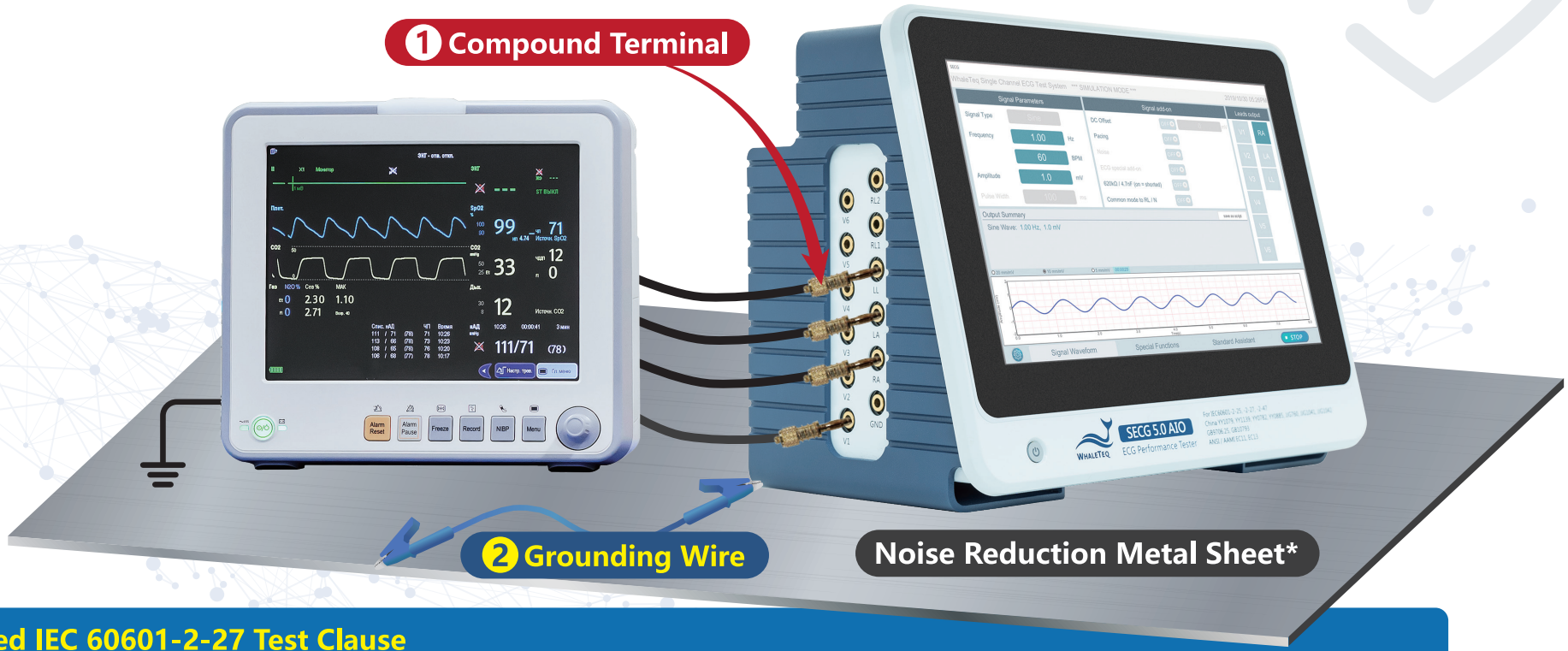
Training & Service

- Simulator & Tester Operation Training (2 hours)
- IEC 60601-2-27 Testing Training (3 hours)
- Testing Consultation (2 hours)

Optional Items • C3R3 3-Year Calibration Service and Warranty Extension • HFCN Electrical Burn Interference Fixture

Ⓐ SECG 5.0 AIO Installation – ECG Hardware Design Verification

The standalone ECG simulator offers flexible parameter settings, including noise, respiration, and lead-off simulation, as well as embedded IEC 60601-2-27 standard assistant software.



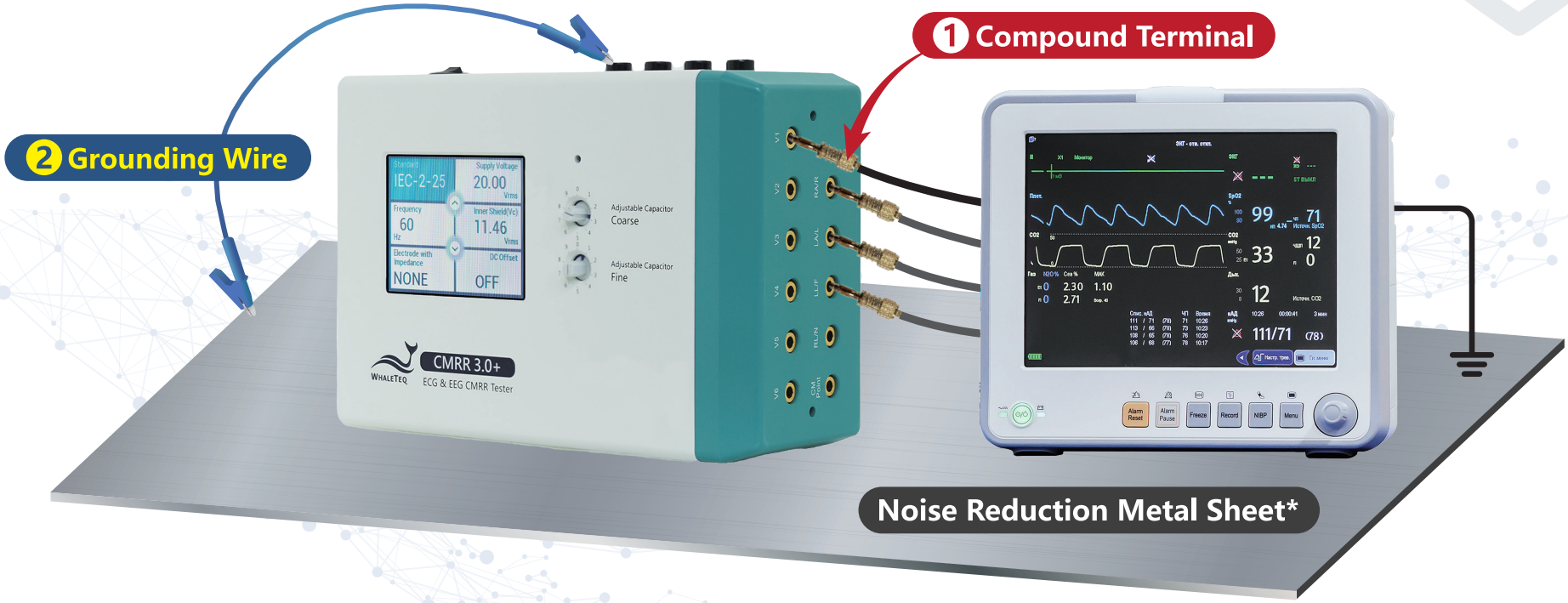
Supported IEC 60601-2-27 Test Clause

- 201.7.9.2.9.101 b), 4) Heart rate meter accuracy and response to irregular rhythm
- 201.7.9.2.9.101 b), 5) Response time of heart rate meter to change in heart rate
- 201.7.9.2.9.101 b), 6) Time to alarm for tachycardia
- 201.11.8 - Interruption of the power supply / SUPPLY MAINS TO ME EQUIPMENT
- 201.12.1.101.1 Accuracy of signal reproduction
- 201.12.1.101.2 Input dynamic range and differential offset voltage
- 201.12.1.101.3 Input impedance
- 201.12.1.101.5 Multichannel crosstalk
- 201.12.1.101.6 GAIN control and stability
- 201.12.1.101.7 Sweep speed
- 201.12.1.101.8 Frequency and impulse response
- 201.12.1.101.9 GAIN INDICATOR
- 201.12.1.101.11 Baseline reset
- 201.12.1.101.12 Pacemaker pulse display capability
- 201.12.1.101.13 Rejection of pacemaker pulses
- 201.12.1.101.14 Synchronizing pulse for cardioversion
- 201.12.1.101.15 Heart rate range, accuracy, and QRS detection range
- 201.12.1.101.16 Channel height and aspect ratio
- 201.12.1.101.17 Tall T-wave rejection capability

*Recommended Metal Sheet Specifications:
[Material] Aluminum, steel, or copper are acceptable; copper is recommended for optimal performance.
[Dimensions] The thickness is not specified, but a recommended size is 60cm × 100cm. A larger surface area provides better noise reduction.
The metal sheet itself serves as a standalone ground and must not be connected to any other grounding point.

Ⓑ CMRR 3.0+ Installation – ECG Common Mode Rejection Ratio Verification

The tester mitigates mains frequency noise interference while helping save time on setting up a noise-free test environment.



Supported IEC 60601-2-27 Test Clause

- 201.12.1.101.4 Input NOISE
- 201.12.1.101.10 Common mode rejection

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IEC 60601-2-27

Test Clause	SECG 5.0 AIO	CMRR 3.0+	HFCN
201.7.9.2.9.101 b), 4) Heart rate meter accuracy and response to irregular rhythm	●		
201.7.9.2.9.101 b), 5) Response time of heart rate meter to change in heart rate	●		
201.7.9.2.9.101 b), 6) Time to alarm for tachycardia	●		
201.11.8 - Interruption of the power supply / SUPPLY MAINS TO ME EQUIPMENT	●		
201.12.1.101.1 Accuracy of signal reproduction	●		
201.12.1.101.2 Input dynamic range and differential offset voltage	●		
201.12.1.101.3 Input impedance	●		
201.12.1.101.4 Input NOISE		●	
201.12.1.101.5 Multichannel crosstalk	●		
201.12.1.101.6 GAIN control and stability	●		
201.12.1.101.7 Sweep speed	●		
201.12.1.101.8 Frequency and impulse response	●		
201.12.1.101.9 GAIN INDICATOR	●		
201.12.1.101.10 Common mode rejection		●	
201.12.1.101.11 Baseline reset	●		
201.12.1.101.12 Pacemaker pulse display capability	●		
201.12.1.101.13 Rejection of pacemaker pulses	●		
201.12.1.101.14 Synchronizing pulse for cardioversion	●		
201.12.1.101.15 Heart rate range, accuracy, and QRS detection range	●		
201.12.1.101.16 Channel height and aspect ratio	●		
201.12.1.101.17 Tall T-wave rejection capability	●		
202.6.2.101 Electrosurgery interference			●