DFS360

AED / Defibrillator Tester

Displays defibrillation shock waveform, energy (in Joules), parameters, and characteristic points at the same time

- Intuitive software interface with shock-related information on one screen – the waveform, energy (in Joules), parameters, and characteristic points captured at a sampling rate of 4μs
- Automatically saves complete raw data of the shock waveform to establish a test history
- Outputs ECG waveforms with selectable adult and child modes to achieve high accuracy for testing
- Raw data playback – plays recorded raw data or customized waveforms for repeated verification to facilitate the development process
- Repeatability and Reproducibility Analysis – compares the shock waveforms of multiple DUTs or a single DUT to confirm the consistency of quality and reliability, facilitating conducting the endurance test described in IEC 60601-2-4*
- Provides software development kit (SDK) for developing automated testing programs

*Note: The Repeatability and Reproducibility Analysis needs a separate purchase.

Specifications

Energy Measurement Specifications

Items	Specifications
Maximum Energy	Range: Up to 600J Accuracy: ±1% of reading ±1J for up to 360J; ±1% of reading ±1J, typical for 360J – 600J
Voltage	Range: Up to 3000V Accuracy: ± (1% of reading + 1V) for 450V – 3000V & -450V – -3000V; ± (1% of reading + 2V) for -450V – 450V
Current	Range: 1.2 – 100.0A Accuracy: ± (1% of reading + 0.1A)
Load Resistance	Resistance: 50Ω
Energy Accuracy	For 50Ω: ±1% of reading ±0.1J for up to 360J; ±1% of reading ±0.1J, typical for 360J – 600J Note: Maximum energy of monophasic defibrillation may not reach 360J.
Pulse Trigger Level	60V
Pulse Width	Range: 1.0 – 60.0ms Accuracy: ±0.05ms
Sample Rate	250kHz (4μs sample)
Maximum Average Power	12W, equivalent to 1 defibrillation pulse of 360J every 30 seconds

General Specifications

Items	Specifications
Temperature	Operating: 0°C – 50°C (32°F – 122°F) Storage: -20°C – +60°C (-4°F – +140°F)
Humidity	10% – 90% non-condensing
Communications	USB Type-C connector
Operation Modes	Remote (PC Software via API and SDK)
Power	USB 3.0 Bus Power
Mechanical	Housing: ABS Plastic Size (L x W x H): 19.0 x 12.5 x 6.0cm Weight: 665g

ECG Signal Specifications

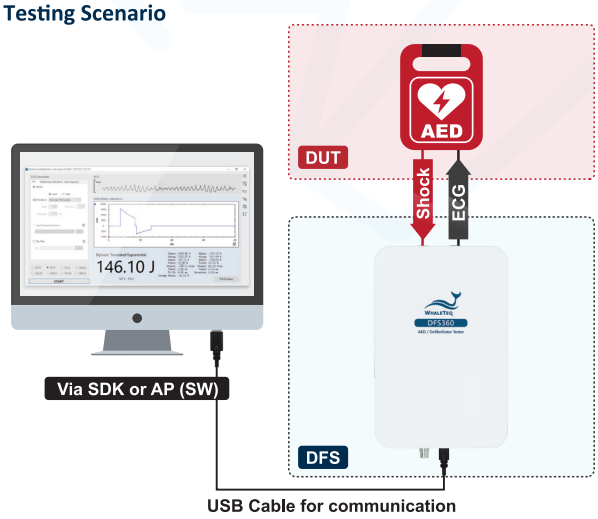
Items	Specifications
Ventricular Fibrillation - Coarse	Vp-p = 3mV
Ventricular Fibrillation - Fine	Vp-p = 0.5mV
Ventricular Tachycardia (≒180BPM)	Vp-p = 3mV
Ventricular Tachycardia Plus (≒234BPM)	Vp-p = 3mV
Atrial Fibrillation	Vp-p = 1.2mV
Asystole	Vp-p = 0.03mV
Normal Sinus Rhythm (NSR) (20 – 360BPM by 1BPM per step)	Vp-p 0.5 – 5.0mV, step 0.5mV
User-defined Pattern (Max. 5kHz Sample Rate)	Load Customized Waveform function: Load a total capacity of up to 1000 seconds of raw data files with variable duration for each file to the DFS360 memory. Play Data function: Directly select and play raw data files stored on the computer with no file size limitations.
RCA Output Amplitude Range	1:880
RCA Output Amplitude Accuracy	±5% Vpp

Compliance Specifications

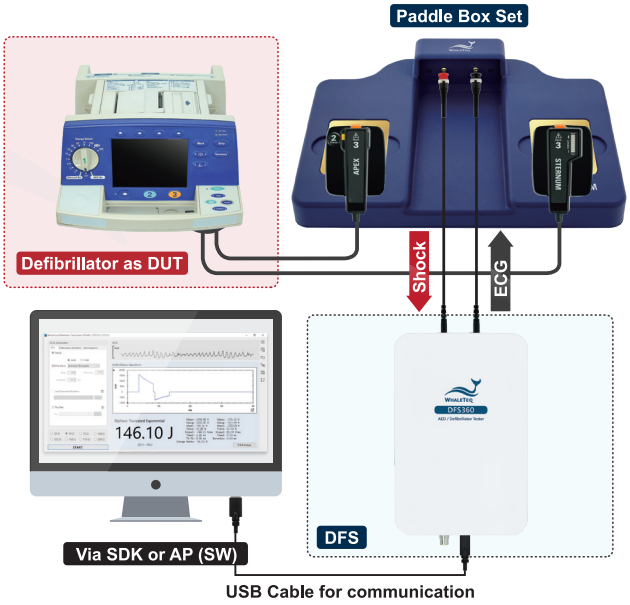
Items	Specifications
Safety Standards	CE: IEC / EN61010-1 : 2010 + A1 : 2016; Pollution degree 2 61010-2-030 : 2017
Electromagnetic Compatibility Standards (EMC)	CE: EN61326-1 FCC: EMC P15B

* Specifications are subject to change without prior notice.

• AED Testing Scenario



• Defibrillator Testing Scenario (Optional)



Ordering Information

DFS360 Test System

Part No.	Description	Quantity
100-DF00003	**Model No.**: DFS360 **Model Name**: AED/Defibrillator Tester	1

Optional Accessories

Part No.	Description	Quantity
K21-0738301	RCA to BNC cable (73.8cm)	1
K22-0500101	Open-ended AED Cable (Banana Male), 0.5 meter (Black)	1
K22-0500102	Open-ended AED Cable (Banana Male), 0.5 meter (Red)	1
N61-0210033	Compact Splicing Connector	1
K27-1800304	USB Transfer Cable: Type-A to Type-C (Male to Male), 1.8 meter	1

Optional Paddle Box Set

Part No.	Description	Quantity
300-DFPDOCK	DFS Tester Docking Base for Defibrillator	1
5HA-DF0L001	DFS Tester Defibrillation Receiving Plate	2
5HA-DF00001	AED Cable for Paddle Box, Female to Male (Black)	1
5HA-DF00002	AED Cable for Paddle Box, Female to Male (Red)	1

Optional Tool

Part No.	Description	Quantity
800-DF07001	Barcode Scanner (Argox barcode scanner, model no. AS-9400)	1

Optional Software Add-On Pack

Part No.	Description
HE0-DF00001	Repeatability and Reproducibility Analysis for inspecting DUT's quality and performance
HE0-OT00001	Barcode Scanner License

Optional Calibration Service and Warranty Extension

Part No.	Description
YY0007	**Model No.**: C3 Provides (3) years of calibration service coverage. WhaleTeq equipment can be calibrated to original performance on the basis of (1) year interval.
YY0008	**Model No.**: R3 Extends the limited warranty from (1) year to (3) years.

DFS360
Scan for more information

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