

KingPo

Medical Test Equipment

IEC 60601-2-4 Defibrillation Electrode Performance Tester

KP-DFT100E Product Catalogue

Integrated electrical performance testing platform for disposable defibrillation electrodes and multifunction defibrillation electrodes.

5 kV / 360 J

Clause 201.108

7-inch Touchscreen



Standards

IEC 60601-2-4 / GB 9706.204

Test Objects

Disposable & multifunction electrodes

Main Functions

AC impedance, recovery, DC offset, pacing

Users

Manufacturers & labs

Product Overview

The KP-DFT100E is a dedicated benchtop tester for evaluating the electrical performance of disposable and multifunction defibrillation electrodes. It is configured for standard-related electrode testing rather than general defibrillator analyser work or ECG electrode testing.

Standard-oriented test scope

Supports selected methods related to IEC 60601-2-4:2018 Clause 201.108 and GB 9706.204:2022 Clause 201.108.

Five integrated test functions

AC small-signal impedance, AC large-signal impedance, 360J recovery, DC offset voltage and pacing signal testing.

One-touch automatic workflow

Built-in test circuits, standard programs and automatic report/data generation reduce manual setup complexity.

Purpose-built product positioning

Designed for defibrillation electrode performance evaluation, especially high-energy recovery and pacing-related tests.

KP-DFT100E

Defibrillation Electrode Performance Tester









Medical device labs

Multifunction electrodes

Disposable electrodes

Integrated Test Function Coverage

The instrument combines low-signal, high-energy and multifunction-electrode test modes in one platform. The table below summarizes the core conditions used for catalogue level evaluation.

1		Related Standards	<ul style="list-style-type: none"> IEC 60601-2-4:2018 Clause 201.108 GB 9706.204:2022 Clause 201.108
2		AC Small-Signal Impedance	<ul style="list-style-type: none"> Sinusoidal AC current: 100 μA Test frequency: 10 Hz / 30 kHz Measurement range: 0-5 kΩ
3		AC Large-Signal AC Impedance	<ul style="list-style-type: none"> Defibrillation source: 5 kV, 360 J Series load: 50 Ω Representative voltage range: -5 kV to 5 kV
4		360J Defibrillation Recovery Test	<ul style="list-style-type: none"> Source: 5 kV, 360 J Series load: 50 Ω Recovery observation: 4 s / 60 s / Custom
5		DC Offset Voltage Test	<ul style="list-style-type: none"> Input resistance: ≥ 10 MΩ Resolution: 1 mV Measurement range: -400 mV to 400 mV Test time: 60-90 s
6		Multifunction Electrode Pacing Signal Test	<ul style="list-style-type: none"> Adult / Pediatric waveforms Pulse width: 20 ms / 40 ms Voltage: 5 V / 7 V / 10 V Rate: 170 BPM / 180 BPM Test time: 60 min / Custom


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Key parameter overview extracted from the official KP-DFT100E product page.

01

AC Small-Signal Impedance

100 μ A sinusoidal AC current; 10 Hz / 30 kHz; 0-5 k Ω measurement range.

02

AC Large-Signal Impedance

5 kV / 360 J defibrillation source with 50 Ω series load; representative voltage range -5 kV to 5 kV.

03

360J Recovery

Evaluates electrode recovery after high-energy exposure; 4 s / 60 s / custom observation.

04

DC Offset Voltage

≥ 10 M Ω input resistance; 1 mV resolution; -400 mV to 400 mV range.

05

Pacing Signal Test

Adult and pediatric waveform conditions with 20 ms / 40 ms pulse widths and 60 min/custom test time.

Technical Specifications

The following values are catalogue-level specifications collected from the product information page. Confirm final configuration, local power requirements and documentation needs before order release.

Item	Specification
Model	KP-DFT100E
Product Type	Defibrillation Electrode Performance Tester
Related Standards	GB 9706.204:2022 Clause 201.108; IEC 60601-2-4:2018 Clause 201.108
Test Object	Disposable defibrillation electrodes; multifunction defibrillation electrodes
Main Test Items	AC small-signal impedance, AC large-signal impedance, 360J recovery, DC offset voltage, pacing
Control Interface	7-inch capacitive touchscreen
Screen Resolution	800 x 480
Operation Mode	One-touch automatic operation with built-in standard test program
Test Circuit	Built-in test circuit
Report Function	Automatic test data and report generation
Power Supply	AC 220 V +/-10%, 50 Hz / 60 Hz
Dimensions	480 x 460 x 200 mm
Weight	Approx. 10 kg
Applicable Users	Medical device quality inspection institutions, electrode manufacturers, research institutes



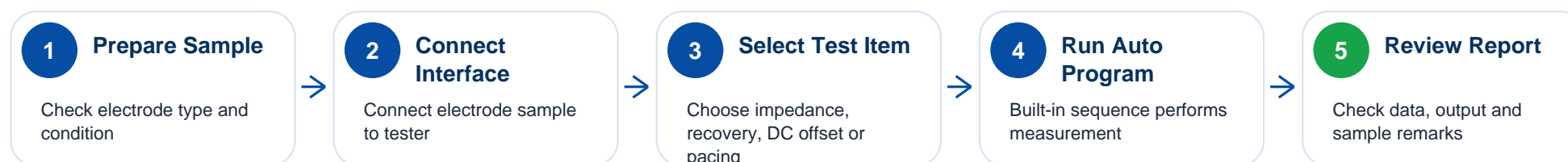
Front angled view - connectors and touchscreen interface.



Top angled view - benchtop enclosure and protective handles.

Testing Principle and Workflow

Disposable defibrillation electrodes must provide stable contact, withstand high-energy discharge, recover after energy delivery and support pacing signal transmission where the electrode is multifunctional. KP-DFT100E applies defined electrical conditions and records the resulting impedance, recovery, DC offset or pacing-related values.



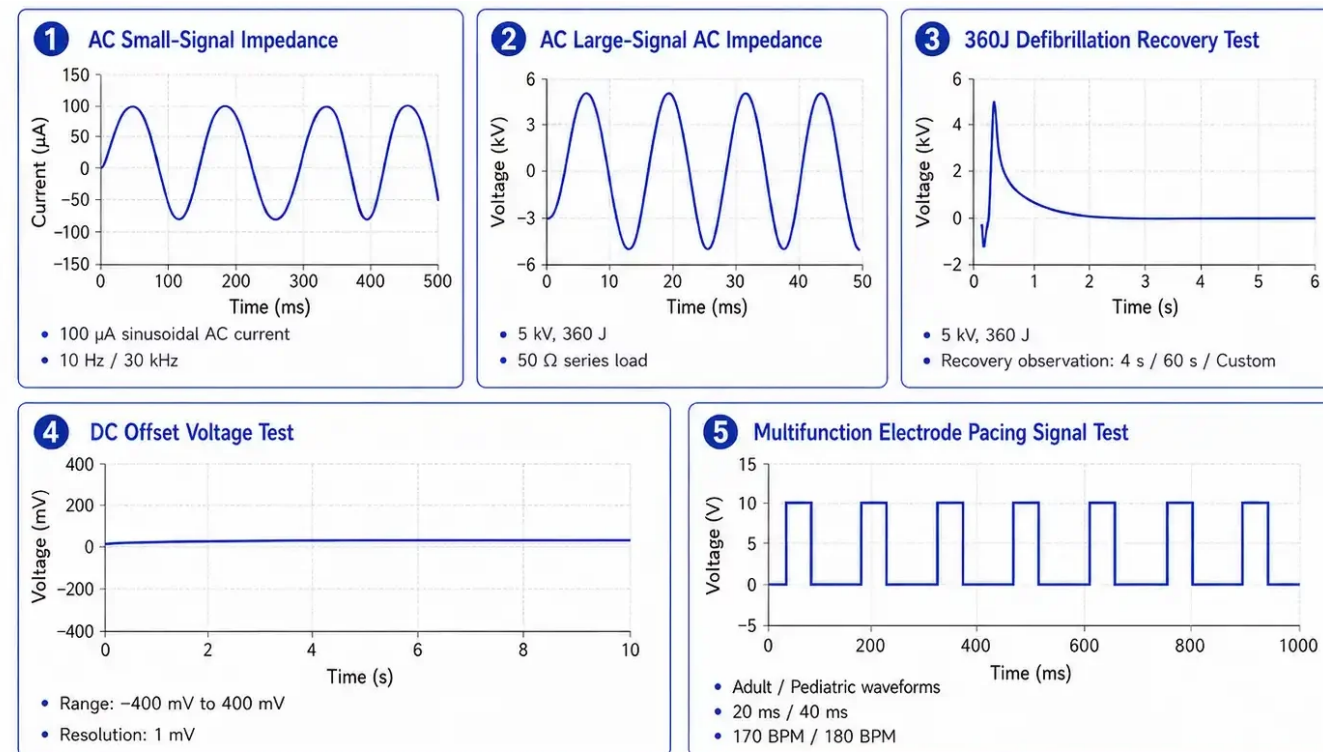
How the test modes map to electrode behavior



Waveform Reference

Representative waveform views help users understand how the instrument separates low-signal impedance, high-energy response, DC offset and

Pacing signal conditions



Representative export views for IEC 60601-2-4 and GB 9706.204 related defibrillation electrode testing.



Representative export views for IEC 60601-2-4 and GB 9706.204 related defibrillation electrode testing.

Pacing Signal Conditions

- Adult 20 ms: 10 V, 2.833 Hz, 170 BPM
- Adult 40 ms: 7 V, 3.0 Hz, 180 BPM
- Pediatric 20 ms: 5 V, 2.833 Hz, 170 BPM
- Pediatric 40 ms: 5 V, 3.0 Hz, 180 BPM
- Measurement time: 60 min or customized

Configuration Review

Before final testing, confirm electrode type, standard version, required test items, pacing conditions, report format and power supply requirement.

Applications and Expert Support

KP-DFT100E is intended for manufacturers, inspection bodies and laboratories that need repeatable, standard-related defibrillation electrode performance evaluation and technical documentation support.

Typical Users

- Disposable defibrillation electrode manufacturers
- Multifunction defibrillation electrode manufacturers
- Medical device quality inspection institutions
- Third-party medical device testing laboratories
- R&D; laboratories and research institutes
- Incoming inspection and production QC teams

Operation Notes

- Confirm standard clause and test mode before testing.
- Check sample condition and interface connection.
- Use correct mode for impedance, recovery, DC offset or pacing.
- Apply laboratory safety controls for high-voltage/high-energy items.
- Verify report format before formal QC or type-test support.

Metrological Integrity

Factory verification of key test functions is performed before delivery. Regular verification of the test circuit, signal source, measurement interface and safety protection functions is recommended for repeatable results.

Technical Inquiry Checklist

To recommend the correct configuration, please provide: electrode type, applicable standard version, required test items, disposable or multifunction use, pacing conditions, report format, power supply and any customized procedure requirements.



Product Page

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