The QED 6 provides a scalable solution to accurately test defibrillators. Lightweight and portable, the QED 6 measures a wide range of defibrillator energy output parameters. An RS-232 serial port supports remote computer control and test documentation.

Key features

- Defibrillator Analyzer
- Monophasic and biphasic dc energy measurement
- Energy and cardioversion measurement
- Peak voltage, peak current, and overshoot measurement
- 2-line x 24-character display
- Bidirectional RS-232 port for computer control
- Storage and playback of output waveform so results can be viewed in greater detail
- Optional Ansur test automation software to standardize testing procedures, capture waveforms and test results, and print and document test results
Technical Specifications

Output energy test
Load
50 ± 1 %, with inductance < 70 µH

Resolution
High-range: 1 J; low-range: 0.1 J
Low-range
0 J to 100 J
High-range
0 J to 1000 J

Pulse width
1 ms to 50 ms

Maximum current
Low: 35 A; high: 110 A

Maximum voltage
Low: 1750 V; high: 5500 V

Minimum voltage
Low: 20 V, high: 66 V

Accuracy
1000 J range: ± 2 % of reading; 100 J to 1000 J: ± 2 %; 100 J range: ± 2 % of reading, ± 0.1 J

Waveform storage
Discharge viewable via ECG output, paddles, and scope output

Time expansion lead II amplitude
High = 3000 V / mV; low = 900 V / mV

Peak/overshoot
Voltage accuracy
1000 J range: ± 10 V; 100 J Range: ± 25 V
Current accuracy: ± 1 A

Cardioversion synchronization test
Measurement from peak or base of simulated R-wave: 0 ms to 199.9 ms
Accuracy: 1 % of full scale or ± 2 ms, whichever is greater

Defib waveform playback
Time base expansion
100:1 at 25 mm/s paper speed, each division equals 40 ms

Amplitude scaling
Lead II (RA-LL): 1000 J range: 1 mV = 3000 V; 100 J range: 1 mV = 900 V

ECG output
1000 J range: 0.5 V = 3000 V; 100 J range: 0.5 V = 900 V

Scope outputs
ECG hi-level
Fixed at 1 V
Accuracy
± 2 %

Defib output
Real time

Waveform output
5 ECG lead adapters, front-panel paddles, and high-level scope output

Calibration screen
Load
50 ± 1 % (Apex-Sternum)
Amplitude scaling
Apex (+) to sternum (-)
Zero voltage input
0 ± 2 counts

RS-232 output/computer control
Note: Computer control allows the user to operate the QED 6 remotely via a serial RS-232 interface. It requires an RS-232 cable and a bidirectional D-9 connector.

Selectable communications parameters
Baud rate
300, 600, 1200, 2400, and 9600
Parity
None, even, odd
Stop bits
1 or 2
Data bits
7 or 8

Environmental requirements
Storage temperature
-25 °C to 50 °C (-13 °F to 122 °F)
Operating temperature
0 °C to 40 °C (32 °F to 104 °F)

Maximum humidity
90 % relative humidity

General information
Display
2-line x 24-character super twist LCD

Power
One 9 V alkaline battery or 9 V battery eliminator; 12 hours continuous operation; low-battery indication; 120/240 V battery eliminator input

Dimensions (WxDxH)
24.13 cm x 26.67 cm x 10.16 cm (9.5 in x 10.5 in x 4 in)

Weight
2.06 kg (4.54 lb)
Ordering information

Model
2251457 QED-6 Defibrillator analyzer

Standard accessories
2204510 User Manual
2204198 Internal Paddle Discharge Contact Adapters (two each)
2720054 Battery Eliminator, 90–264 V ac/ 9 V dc

Interface cables and accessories (optional)
2817226 Ansur QED 6 Plug-in
2204282 Soft-Sided Vinyl Carrying Case
2204472 RS-232/Printer Cable
2248899 Printer, Seiko DPU-414–30B 120 V Power Supply
2399531 Printer, Seiko DPU-414–30B 220 V Power Supply
2235375 Printer, 120 V Power Supply
2235382 Printer, 220 V Power Supply
2248737 Printer Paper (7 rolls min, priced per individual roll)
2204472 Serial Cable D9F–D9F
2391907 Printer Cable DPU 411
2204485 Serial Printer Cable DPU 414, DB9F to DB9F

Defibrillators electrode adapters (optional)

Note: Refer to your sales representative or directly to Fluke Biomedical for most current listing of available adapters.

2200125 Agilent/HP: Codemaster XL + series (inline round connector included)
2200687 Agilent/Philips: HEARTSTREAM FR2, XL AND XLT series (inline rectangular connector)
2392362 GE-Marquette: Responder series (snap connector included; two adapters required)
2392396 Laerdal: HEARTSTART/SpaceLabs: FIRST MEDIC (early series) round snap connector included; two adapters required
2199354 MDE (Medical Data Electronics: All) (inline R2/Darox connector included)
2392249 Medtronic Physio-Control LifePak series: QUIK COMBO (inline connector included)
2392355 Medtronic Physio-Control LifePak series: FAST PATCH (snap connector included; two adapters required)
2199758 Zoll Medical PD series, M series, M series CCT and AED Plus© (Testing the AED Plus© requires the purchase of an additional auxiliary adapter directly from Zoll Medical (Zoll Medical model: 8000-0804-01))