

Surge Testers

Megapulse D5-PF



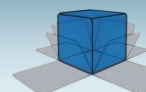
IEC 60601 Defibrillation proof tester including direct energy readout (J) for energy reduction tests

Surge tester built to the requirements of IEC 60601-1:2005 (Issue 3) Figure 10 (IEC 60601-1 Figure 50 in older versions). Conducts IEC 60601-1:2005 Figure 11; IEC 60601-2-34 Issue 2(Optional); IEC60601-2-34 Issue 3(Included); IEC 60601-2-49; EC-13; EC-53 and the new requirement of IEC 60601-2-25:2011 and IEC 60601-2-27:2011 including Correction 1. Tests of protection against the effects of defibrillation (Common mode, Differential mode), Energy reduction test. All these tests use the same 5000V source with difference in output wave shaping. The various wave shaping output circuits required for each test are included in the D5-PF.

The more remarkable changes of the D5-PF version are: output voltage selected digitally, direct joules readout, increased accuracy, faster time between pulses "20 seconds", increased signal generator voltage, pass/fail reference is integrated, dry cap is used and USB Testminder is standard.

Features

- Output voltage selected digitally on the front panel
- Integrated High Voltage on hold circuit
- Integrated Energy measurement
- Joules readout for the last pulse is displayed by pressing a button
- USB TestMinder, computer control
- Y1-Y2 measuring circuit integrated
- Built-in Pass/Fail reference
- External interlock disables HV output and defeats test when circuit is open
- Long life capacitor rated for 2.5 million pulses
- Front panel indicates internal high voltage and polarity
- Polarity controlled manually on the front panel
- Front panel switches and instructions for various test setups
- Auto-trigger via USB
- Microcontroller technologies
- Cables, manual and calibration certificate included
- One year calibration cycle & one year warranty



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Specifications

Charge Voltage:	0 - 5100 V tolerance $\pm 1\%$
Main Capacitance:	32 μF $\pm 5\%$
Inductances:	500 μH and 25 mH $\pm 5\%$
Main Resistances:	100 Ω , 50 Ω and 400 Ω $\pm 1\%$ non inductive
Voltage Control:	Manually, by turning a knob in the front panel or via USB
Polarity Control:	Positive and Negative. Alternating control available with USB
Voltage Display:	4 Digit LED Display
Voltage Meter resolution:	5V
Voltage Meter Accuracy:	$\pm 1\%$
Duty Cycle:	20s between pulses, $\pm 1\%$ 100 Ω resistor bank, up to 70 pulses 12s between pulses, $+1\%$ $< -5\%$ 100 Ω resistor bank, continuous duty
Line Voltage:	120V AC, 50/60Hz *optional different line voltages available
Energy Measurement	
- Works only when:	25mH inductor selected (in accordance with the energy reduction test)
- Display Resolution:	1 Joule
- Repeatability:	± 1 Joule between pulses



Environmental

Operating Temperature:	15-28 $^{\circ}\text{C}$
Relative Humidity Range:	0-90% non-condensing



General

Dimensions:	17" wide x 18" high x 17" in deep
Weight:	40 lbs approx.
Product Package:	<ul style="list-style-type: none">• Megapulse D5-PF Tester• Megapulse D5-PF Product Manual• High Voltage Test Leads Qty 2 (Black)• High Voltage Test Leads Qty 3 (Red)• NIST traceable calibration certificate to ANSI Z540• Calibration waveforms
Standard Configuration	



Options

100X:	HV jumper to disconnect the internal 100ohm resistor and use external Energy measurement devices like Fluke 7000DP and 7010
34:	Incorporates a circuit for Invasive Blood Pressure test (IEC 60601-2-34 Issue 2)
SG:	Built in Sine Wave Generator 20Vp-p (adjustable on front panel)
GVAC	Vacuum trigger relay (20sec. duty cycle only)
MPxxx	Different Line voltages, replace on the part number xxx for 100, 110, 220, 230 or 240 depending the line voltage. (120V for standard configuration)

