



# MegaPulse

## D8-PF

PN:00-MPD8-PF

- ❖ IEC 80601 Defibrillation proof tester with direct energy readout (J) for energy reduction test.



Surge tester built to the requirements of IEC 80601-2-26:2020, includes all the functions of a standard D5-PF, IEC 60601-1:2005 (Issue 3) Figure 10 (IEC 60601-1 Figure 50 in older versions). Conducts IEC 60601-1:2012 Figures 9, 10 and 11; IEC 60601-2-34 Issue 2(Optional); IEC60601-2-34 Issue 3(Included); IEC 60601-2-49; EC-13; EC-53, 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 D8-PF.

\*Actual products may vary depending on options and configuration.

### ➤ Features

- Updated front panel with digital switches.
- Digital output voltage knob 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.
- Integrated Y1-Y2 measuring circuit.
- Built-in Pass/Fail reference circuit.
- External interlock disables HV output and defeats test when circuit is open.
- Long life capacitor rated for 2.5 million pulses.
- USB TestMinder, computer control.
- Auto-trigger via USB.
- Front panel indicates internal HV and polarity.
- Polarity button selector on the front panel.
- Front panel switches and instructions for various test setups.
- Microcontroller technologies.
- Leads, manual and calibration certificate included.
- One year calibration cycle
- One year warranty.



## ➤ Specifications

### TESTING CIRCUITRY

Charge Voltage:	5100V ±1%.
Main Capacitance:	32µF ±5%.
Inductances:	500µH and 25mH ±5%.
Main Resistance (R1):	100Ω ±1% non-inductive.
Output Impedance:	50Ω and 400Ω ±1% non-inductive. Optional 10Ω available.
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:	±1%.
Duty Cycle:	20s between pulses, ±1% 100Ω resistor bank, up to 70 pulses. 12s between pulses, +1% <-5% 100Ω resistor bank, continuous duty

### ENERGY MEASUREMENT

Works only when:	25mH inductor selected (in accordance with the energy reduction test).
Display Resolution:	1 Joule.
Repeatability:	± 2 Joules between pulses.
Reading:	From 3000V to 5100V only.

### ELECTRICAL

Line Voltage:	120V AC, 50/60Hz. 230V AC ±10%, 50 Hz ±1 Hz (CE for EU).
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### SAFETY

Safety Interlock	2-pin terminal block on rear panel; shorted for operation.
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### OUTPUTS - FRONT

50Ω, 400Ω, AUX, MEAS. POINT:	High Voltage insulated rigid 4mm socket – Red.
RETURN:	High Voltage insulated rigid 4mm socket – Black.
Y1, Y2, SINE WAVE:	BNC.

### OUTPUTS - REAR

ENERGY MEASUREMENT:	High Voltage insulated rigid 4mm socket – Red.
GROUND:	High Voltage insulated rigid 4mm socket – Black.
TESTMINDER:	DB9 Female.
Inlet Module:	Inlet module with fuse and power switch combination.

## ➤ Environmental

Operating Temperature:	15-28 °C.
Relative Humidity Range:	0-90% non-condensing.



## ➤ General

Dimensions:	17" wide x 11" high x 17" deep.
Weight:	40 lbs. approx.
Product Package:	<ul style="list-style-type: none"> <li>• Megapulse D8-PF Tester.</li> <li>• Megapulse D8-PF User Manual.</li> <li>• High Voltage Test Leads Qty 3 (Red), Qty 2 (Black)</li> <li>• NIST traceable calibration certificate to ANSI Z540</li> <li>• Calibration waveforms</li> </ul>

## ➤ Options

00-SG:	Built in Sine Wave Generator 200mVp-p to 22Vp-p (adjustable on front panel).
00-34:	Incorporates a circuit for Invasive Blood Pressure test (IEC 60601-2-34 Issue 2).
00-2-4	Overload Test Option, adds 10Ω output for IEC 60601-2-4 testing.
00-100X:	HV jumper to disconnect the 100Ω internal resistor to use external energy measurement devices like Fluke 7000DP and 7010.
00-GVAC:	Vacuum trigger relay (20sec. duty cycle only), for a cleaner waveshape output.
00-MP-RC-02:	Remote Control (wired).
00-MP-RC-01-CA-20	MegaPulse Remote Control Cable 20ft
00-D8-PF-SDO	Safety Discharge Option, adds emergency stop switch, main capacitor discharge circuit, outputs isolation relay and power ON LED indicator.
00-MP220, MP230, MP240:	220V, 230V or 240V mains tester operation available.
00-MP-BB-001	Medical Breakout Box (Separate box).
00-CASE-9U:	Pelican Case with foam for 6U and 9U units.
A2LA-TECH-MP	ISO17025 Calibration

