# Surge Testers MegaPulse Biphasic EN45502-2-2





### EN45502-2-2 Sec. 20 - External Defib Protection Test 2

A Compliance West surge Tester. That means it outputs a guaranteed waveform but won't break the bank. The tester outputs the waveform it is supposed to, time after time.

Built in the USA. Email and phone support free for life. Reasonable repair and calibration charges. Timely and helpful customer service always.

The Bipahsic EN 45502-2-2 outputs the pulse described in EN45502-2-2 Fig. 112. Front panel switch chooses the mono- or biphasic output from Standard Table 103 when discharged into the resistor network shown in Fig. 110. For tester protection, Fig. 110's R7 and R1 are supplied internally. In accordance with the standard, the Megapulse Biphasic EN45502-2-2 can recharge and trigger the next pulse within 20 seconds.



### **Features**

- Up to 270V test voltage.
- Microcontroller technologies, front panel voltage meter indicates test peak open circuit voltage and polarity.
- Output voltage and polarity are controlled manually from the front panel.
- Ergonomically designed for safety, speed and efficiency.
- Cables, manual and calibration certificate included.
- External interlock disables HV output and defeats test when circuit is open.
- Optional USB Testminder, computer control.
- Optional Resistor network of Fig. 110.
- One year calibration cycle.
- One year warranty.



# MegaPulse Biphasic EN45502-2-2



# **Specifications**

Output Voltage (Vtest): 0 - 270 V + 5%, -0%Main Capacitor:  $(150 \pm 50) \text{ uF},$ 

Waveform	Pulse duration:T <sub>d</sub>	Risetime: t <sub>r</sub>	Falltime: t <sub>f</sub>	Commutation time: t <sub>c</sub>
Monophasic	9.5 ms <td< 10.5ms<="" td=""><td>1 μs &lt; t<sub>r</sub> &lt; 5 μs</td><td>1 μs &lt; <math>t_f</math> &lt; 5 μs</td><td>Not applicable</td></td<>	1 μs < t <sub>r</sub> < 5 μs	1 μs < $t_f$ < 5 μs	Not applicable
Biphasic	9.5 ms <td< 10.5ms<="" td=""><td>1 μs &lt; t<sub>r</sub> &lt; 5 μs</td><td>1 μs &lt; <math>t_f</math> &lt; 5 μs</td><td>t<sub>c</sub> ≤ 2 ms</td></td<>	1 μs < t <sub>r</sub> < 5 μs	1 μs < $t_f$ < 5 μs	t <sub>c</sub> ≤ 2 ms

Rout:  $R1 = 50 \Omega \pm 5\%, R7 = 5 \Omega \pm 5\%$ 

Voltage Control: Manually, by turning a knob in front panel

Polarity Control: Positive and negative. Alternating control available with

optional computer control

Voltage Display: 4 digit LED display

Voltage Meter Accuracy: ±3V

Duty Cycle: 1 pulse every 20 seconds

Line Voltage: 120V AC, 50/60Hz \*optional different line voltage



## **Environmental**

Operating Temperature: 15-40 °C

Relative Humidity Range: 0-90% non-condensing



# **General**

Dimensions: 10" wide x 5" high x 12" in deep

Weight: 12 lbs approx.

Product Package: • Megapulse Biphasic EN45502-2-2 tester

Megapulse Biphasic EN45502-2-2 product manual

High Voltage Test Lead (Black), 4 feetTwo High Voltage Test Leads (Red), 4 feet

NIST traceable calibration certificate to ANSI Z540

Calibration waveforms



# **Options**

XI: External interlock; two position terminal block on the rear

panel must be shorted for voltage operation.

TMM: Testminder USB computer interface software. The tester can

be controlled with a computer. It can also be set to automatically follow test sequences and keep a record with test information. Compatible with Windows 32bit platform.

220, 230 or 240: If a different line voltage is desired, with this option we

install a step down transformer to be compatible with your line voltage. 220 is for 220V, 230 for 230V and 240 for

240V.

Resistor Network: Built in resistor network of Figure 110. Without the resistor

network option the user must attach the remaining resistors

outside the tester.

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