

# MODEL DC-1A

## Low Voltage Digital D.C. Spark Tester

- >> Reliable D.C. spark testing
- >> For remote or custom-made fault sensors
- >> Test voltages from 500v
- >> Current limited for operator safety
- >> CE Approved



DC-1A

The DC-1A Digital D.C. Spark Tester provides reliable low voltage spark testing in applications where custom-made fault sensors are required. Designed to work with a customer-supplied sensor or electrode, the DC-1A delivers a low D.C. test voltage to the high voltage input of the electrode through a connecting cable that can be as long as 200 feet. Test voltages are variable from 50 to 1000 volts and are current-limited for operator protection. A safety interlock cable assembly is also included to insure that the test voltage on the fault sensor is removed when its protective guard is lifted.

Digital test voltage and fault count displays are vivid and easy to read. Wiring and setup are done externally—there is no need to open up the unit. Membrane switches on the display panel allow the operator to configure the spark tester in a variety of modes and to set the length of time that process control relay contacts are energized after a fault occurs. Relay contacts are accessible on a rear panel connector for easy wiring to external alarms, lights or machines that are to



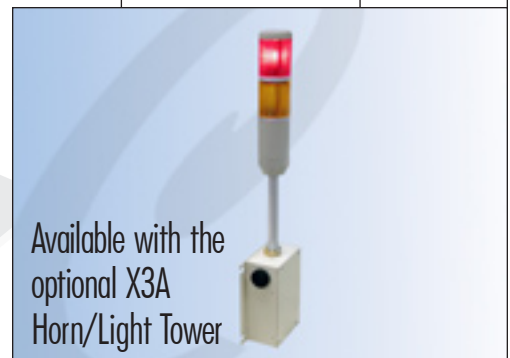
DC-1A Back Panel



DC-1A Front Panel

be controlled by the spark tester. The standard RS-485 serial interface can receive and respond to digital commands. Spark tester voltage can be set or verified, the fault count and interlock status can be monitored, and many other tasks can be performed by computer or PLC.

The DC-1A meets safety standard IEC-1010 and is CE approved.



Available with the optional X3A Horn/Light Tower

**Clinton**  
INSTRUMENT COMPANY

# DC-1A SPECIFICATIONS

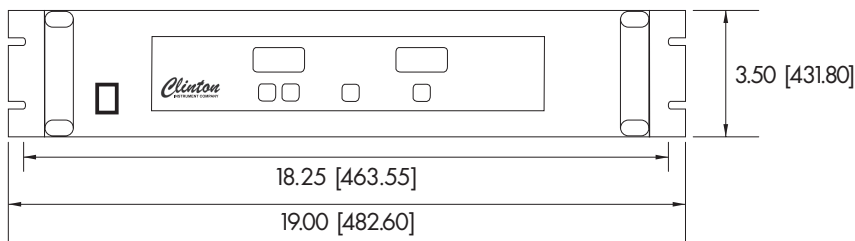
Voltage Test Range.....50v to 1KV (minimum voltage varies on electrode design.)  
 Supply Voltage and Frequency..100 to 240V AC 49-61 Hz. Power supply is self adjusting.  
 Current Consumption .....1 ampere maximum.  
 Maximum Test Voltage .....1 KV DC.  
 Test Range.....50v to 1KV DC.  
 Voltage Display.....Red 3-digit 14.2mm high LED display.  
 Voltage Accuracy..... +/-2% of reading.  
 Fault Threshold Current.....200uA @ 1000v.  
 Electrode/Sensor .....Customer Supplied.  
 Process Control.....Relay, form "C" contacts rated 1 amp max @ 240VAC, 2 amps max @ 120VAC, for both NO and NC circuits.  
 Communications .....RS-485 Serial Interface; Analog (optional); Ethernet (optional); Profibus (optional).  
 Safety .....Designed to IEC-1010.

## High Voltage & Interlock Connecting Cables

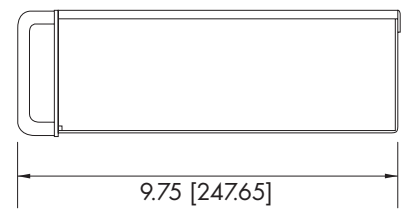


## BRC-W Control Unit

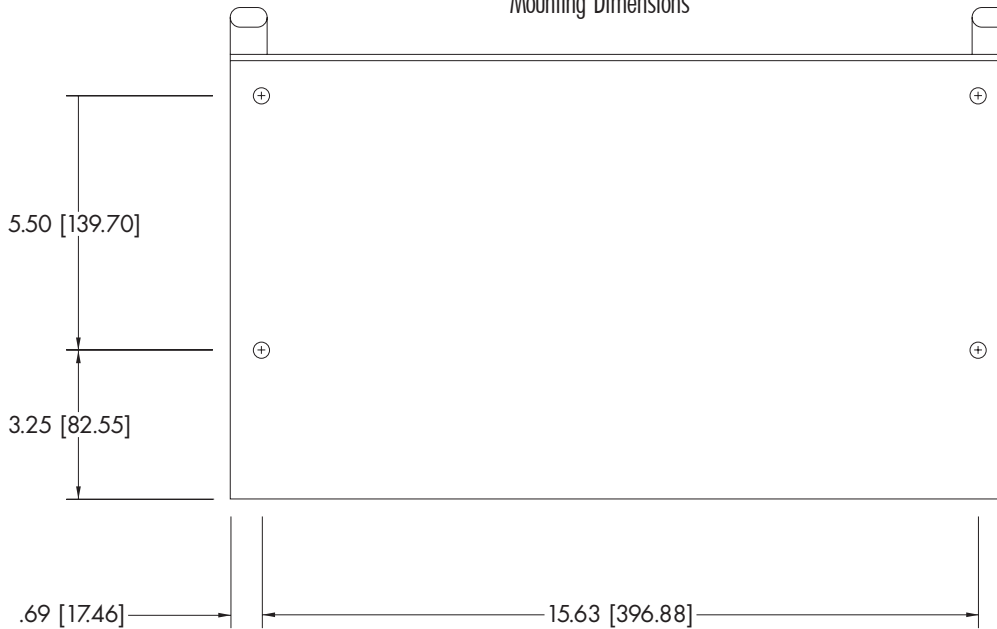
Front View



Side View



Mounting Dimensions



DIMENSIONS IN INCHES [MILLIMETERS]

