DC-A

Digital D.C. Spark Tester Series

- Reliable D.C. spark testing for remote or custom-made fault sensors
- 1KV, 10KV and 20KV Models
- Low voltage testing available
- Current limited for operator safety
- CE Approved

DC-20A

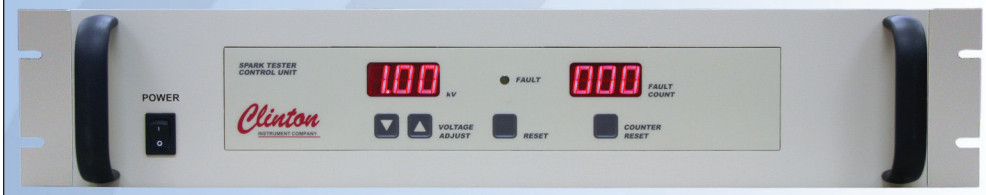
The DC-A Series of Digital D.C. Spark Testers provides reliable spark testing in applications where custom-made fault sensors are required. Available in 1KV, 10KV, and 20KV models, the unit delivers a D.C. test voltage to the high voltage input of the electrode through a connecting cable that can be as long as 200 feet. The DC-1A delivers a low test voltage variable from 50 volts to 1KV. DC-10A and -20A models are accurate from 500 volts and are current-limited for operator protection. A safety interlock cable assembly is included to remove test voltage on the fault sensor when its protective guard is lifted.

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.

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-A Series meets safety standard IEC-1010 and is CE approved.

Back Panel



DC-1A Front Panel

Available with the optional X3A Horn/Light Tower

Clinton INSTRUMENT COMPANY

DC-A
SPECIFICATIONS

Voltage Test Range:
- DC-1A ..... 50 volts to 1KV DC (minimum voltage varies on electrode design).
- DC-10A..... 500 volts to 10KV DC (minimum voltage varies on electrode design).
- DC-20A..... 500 volts to 20KV DC (minimum voltage varies on electrode design).

Voltage Accuracy..... +/-2% of reading.

Output Current:
- DC-1A ..... 2.0 milliamperes maximum.
- DC-10A..... 1.5 milliamperes maximum.
- DC-20A..... 0.75 milliamperes maximum.

Fault Indication..... Red 3-digit 14.2mm high LED display, amber indicating light.

Fault Response ..... Less than 1 millisecond.

Current Consumption ..... 1 ampere maximum.

Fault Threshold Current..... 200uA @ 1000v.

Operating Modes..... Continuous HV/Remove HV on Fault, Momentary Process Control/Latch.

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).

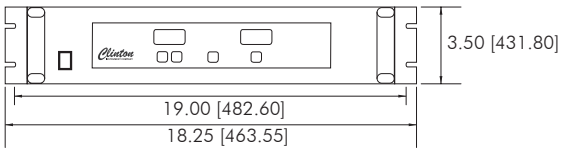
Power Requirements..... 100 to 240V AC 49-61 Hz. Power supply is self adjusting.

Safety ..... Designed to IEC-1010. CE approved.

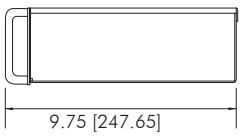
High Voltage & Interlock Connecting Cables

DC-A Control Unit

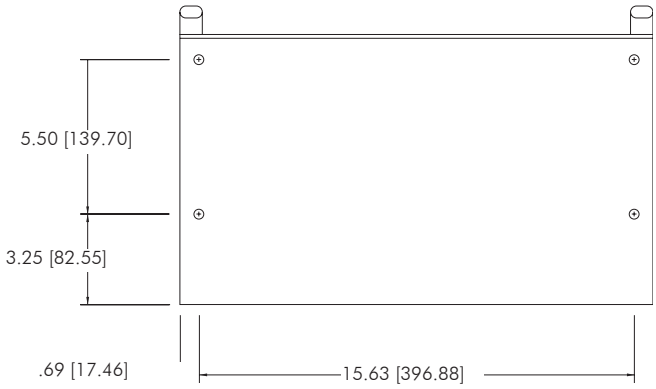
Front View



Side View



Mounting Dimensions



DIMENSIONS IN INCHES [MILLIMETERS]

Clinton INSTRUMENT COMPANY

295 East Main St. • Clinton, CT 06413 USA • Tel: 860.669.7548 • Fax: 860.669.3825 • www.clintoninstrument.com