



QbyV Enamel Rater III

The new QbyV Enamel Rater III instrument tests coverage of the enamel coating inside food and beverage cans. It displays an index of the amount of metal exposed by incomplete enamel coverage on a clear, easily read digital LED.

The instrument applies a constant voltage across the can body and an electrode immersed in an electrolyte-filled can, and measures the resulting current. Test voltage is set at 6.3 VDC but is adjustable from 4 to 9 VDC. Operating range is 0 to 500 milliamperes with accurate resolution within 0.01ma. Remote sensing power supply ensures accuracy by measuring and regulating test voltage at the can being tested.

The instrument operates in industry standard 4 second mode, continuously, or can be programmed to measure any desired time. In 4-second mode, the display shows the reading only at 4 seconds. In

the continuous mode the reading is displayed beside elapsed time with the 4-second reading automatically stored in memory for recall. A simple and foolproof calibration self-test verifies correct, accurate operation.

Location of exposed metal can be determined by reversing voltage which causes bubbles of gas to form on exposed metal for easy visual identification. Electrolyte level and can contact sensors ensure that testing begins only when can is properly filled with electrolyte solution and good electrical contact with the can has been established.

The sturdy enclosure includes a sealed-membrane keypad for protection against moisture and corrosion in the factory environment. A USB virtual serial and RS232 serial interface permits use with remote computers, printers or data collectors. External switching mode power supply for 110/220 volts to 12VDC

Specifications

Display:	2 line LCD Display 2 digit LED timer, 5 digit LED milliamperere reading	Remote sensing power supply:	Improves accuracy by measuring and regulating voltage at the can under test
Power Supply:	Constant voltage, factory set at 6.3V, adjustable 4V to 9V	Display hold:	Pauses display, returns to real time reading when pressed again
Range and Resolution:	0 to 500 ma to 0.01mA	Voltage rev.:	Reverses polarity of electrode to reveal location of exposed metal
Fill height sensor:	Electrolyte must be filled to proper level to start test	Rear Panel:	Power cord socket, RS232 serial output, USB port, Can Holder/End Panel Holder Socket, On/Off Switch
Can Contact Sensor:	Good electrical contact to can must be established to start test	Dimensions:	Console: 6.25"w x 4.5"h x 7.5d Can Holder: 8"w x 12" h x 12"d
Mode Selection:	4-second - automatically reads and displays 4 second reading	Shipping Dimensions:	14" x 14" x 14"
	Continuous - displays changing readings with elapsed times, stores and recalls 4-second and programmable changes	Net Weight:	7 lb
	Programmable - automatically reads and displays the reading at any elapsed time selected by the operator	Shipping Weight:	12 lb

Ordering Information

Catalog No	Description	Catalog No	Description
10790-00	QbyV Digital Enamel Rater 110V/220V, 50/60 Hz, complete with can holder		
10788-17	Cable adapter / foot switch - required to connect QbyV End Panel Holder to Enamel Rater II		
10788-19	Test resistor-reads 6.3 ma	10788-20	Test resistor-reads 12.6 ma
10788-25	Test resistor-reads 126 ma	10788-30	Test resistor-reads 252 ma