

## MODEL 730 - THERMAL TRANSIENT TEST SET DATASHEET

BRIDGEWIRE RESISTANCE RANGE: 0.10 to 10.50 ohms (19-volt maximum DUT voltage)

TEST CURRENT: 10 to 2000 milliamps

CURRENT RESOLUTION: 38 µamps constant current power supply resolution (set in 1 milliamp increments)

CURRENT ACCURACY: Less than 0.5%  $\pm$ 190  $\mu$ amps error over operating temperature

TEST PULSE DURATION: 4 to 250 milliseconds

DATA CAPTURE RESOLUTION: 32-bit resolution over 5-volt full scale range with variable data acquisition input gains ranging from 0.2x to 104x

GAIN DETERMINATION CURRENT (PRE-PULSE CURRENT): <5 millivolts

DATA CAPTURE RATE: 15,625 kSPS (one sample every 64 microseconds)

COLD RESISTANCE ACCURACY: Less than 1%  $\pm$ 190  $\mu$ ohms error over operating temperature

TOTAL NOISE: Less than 3 millivolts p-p at output at minimum gain. Less than 100  $\mu$ volts p-p at higher gains.

ANALOG OUTPUT RESOLUTION: 16-bit resolution over full scale of -3.0 volts to 3.0 volts

ANALOG OUTPUT GAIN: 0 to 500x (May be set to other values via software user interface)

TEST START TRIGGER: Command input from user to start test. TTL level pulse, 15 milliseconds minimum, via a BNC connector or software triggered via software user interface.

SYNC OUT (SWEEP START TRIGGER): TTL output, nominal 1 millisecond, via a BNC connector to trigger oscilloscope sweep prior to start of EED characteristic pulse.

- INPUT POWER: 105 to 125 VAC, 50-60 Hz, 10 Amps (max) 210 to 250 VAC, 50-60 Hz, 5 Amps (max) (option)
- TEMPERATURE: Operating: 15C to +35C Storage: -40C to +70C

COOLING: Fan

DIMENSIONS: 11.23"W x 8.54"H x 7.93"D.

WEIGHT: 18 lbs (approx) net. 34 lbs (approx) shipping

ACCESSORIES: AC power cord, EED Training cable, EED Test cable, Reference bridgewire RB101, Installation, Operation, and Maintenance Manuals