

## UHPC 2A Channel Module

### UHPC Channel Modules - The Best in Precision

NOVONIX's industry leading Ultra-High Precision Coulometry (UHPC) Channel Modules accurately measure and control current and voltage, with high precision and low noise, providing better quality data that allow for greater confidence.

#### UHPC 2A

Part Number: CMA-HDX-99-56



#### SOURCE\*

##### Current

**Range:** 200 $\mu$ A, 2mA, 20mA, 200mA, 2A

**Resolution:** <20ppm FSR

**Accuracy:** 0.01% FSR

**Noise:** 0.002% FSR

**Temperature Coefficient:** 0.002% FSR over 23  $\pm$ 5°C

##### Voltage

**Range:** 250mV, 5V

**Resolution:** 1 $\mu$ V

**Accuracy:** 100 $\mu$ V (<250mV), 200 $\mu$ V (>250mV)

**Noise:** 100 $\mu$ V

**Temperature Coefficient:** 0.002% FSR over 23  $\pm$ 5°C

#### MEASUREMENT\*

##### Current

**Resolution:** <20ppm

**Accuracy:** 0.005% FSR

**Noise:** 0.002% FSR

**Temperature Coefficient:** 0.002% FSR over 23  $\pm$ 5°C

##### Voltage

**Resolution:** <50nV on 0V-0.25V, 1 $\mu$ V on 0.25V-5V

**Accuracy:** 100 $\mu$ V (<250mV), 200 $\mu$ V (>250mV)

**Noise:** 100 $\mu$ V

**Temperature Coefficient:** 0.002% FSR over 23  $\pm$ 5°C

#### TIMING

**Resolution:** 10ms

**Measurement Frequency:** 6Hz

**Accuracy:** 2ppm

#### INTEGRATED RTD TEMPERATURE SENSING

**Resolution:**  $\pm$ 0.01°C

**Accuracy:**  $\pm$ 0.5°C

**Noise:**  $\pm$ 0.05°C

#### TECHNICAL CONSIDERATIONS\*

**Dimensions WxHxD (In):** 19" x 5" x 24"

**Rack Space (U):** 3U

**Weight (lbs):** 28

**Number of Test Channels:** 8

**Bench and Rack Mountable?:** Yes

**Power Draw (VA):** 320VA

**Voltage:** 120VAC-230VAC 50Hz or 60Hz

**Minimum Discharge Voltage:** 0.005V

**Required Lab Temperature Range:** 18°C - 28°C

**Required Lab Temperature Stability:**  $\pm$ 1°C

\*Specifications calculated based on theoretical electronic values in a controlled calibration lab setting using precision resistor elements, not live cells. Under certain test conditions, some measurements on the 1-2A range may suffer up to 200ppm error due to heating effects. For best performance, we recommend pairing Channel Modules with NOVONIX Thermal Chambers, which are specifically designed to provide the temperature stability required for UHPC experiments.

Contact us to learn how UHPC technologies can improve your battery development, manufacturing, selection and more: [bts-sales@novonixgroup.com](mailto:bts-sales@novonixgroup.com)