

# Battery Cell Impedance Measurement (EIS)

## PSM3750 FRA + BATT470m

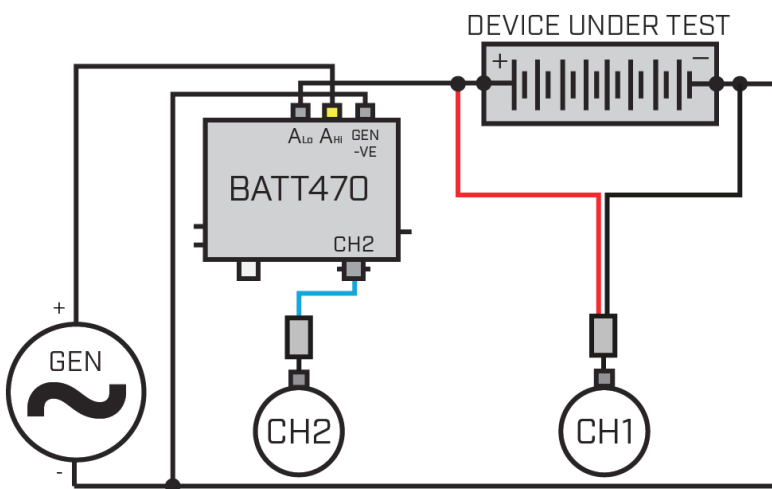
### Electrochemical Impedance Analysis System



ESF10m



Model Shown  
BATT470m-100



The BATT470m Electrochemical Impedance Analysis system provides a simple to use, wideband impedance analysis solution for the electrochemical market. The BATT470m, coupled with the PSM3750 Frequency Response Analyzer facilitates impedance measurement of batteries/cells up to 200V DC. With a frequency range of 100mHz to 1MHz, equivalent circuit analysis as well as wideband impedance measurement is quick and simple using PSMComm2 software. The BATT470m incorporates a DC blocking capacitor and generator protection circuitry to protect the PSM3750 output generator.

Model	Nominal Resistance	Phase Error	Continuous Current	Voltage Rating	Input Connector	Dimensions
BATT470m-100	470mΩ ± 0.1%	0.1° / kHz	1Arms	100V DC	4mm, BNC	119x119x59
BATT470m-200	470mΩ ± 0.1%	0.1° / kHz	1Arms	200V DC	4mm, BNC	187x187x67

Shunt Nominal Inductance: < 1nH

4mm Connectors: AHi, ALo, GEN -ve

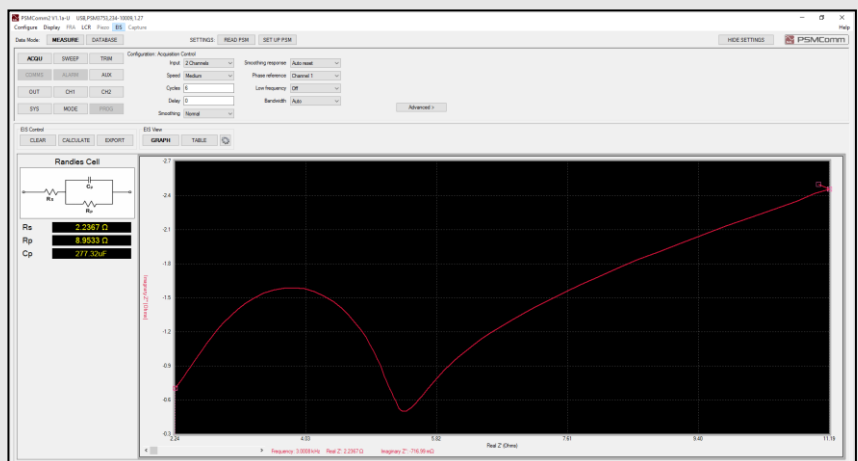
CH2 Connector: Safety BNC – Non isolated (Output is at line potential therefore safety BNC to BNC leads must be used for instrument connection)

Protection Rating: Up to 200V DC (Model Dependent)

EIS System Consists of:

PSM3750+Batt470m-100 (inc 2x ESF10m)

PSM3750+Batt470m-200 (inc 2x ESF10m)



PSMComm2 - EIS Mode (Randles Cell equivalent circuit modelling)