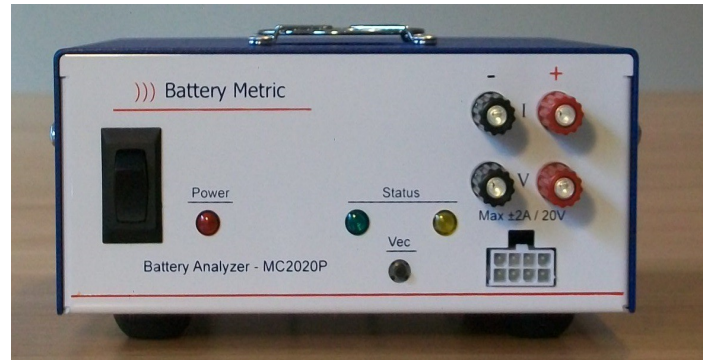# Battery Metric

MC2020
Battery Test Module

FEATURES

- Control using BA500WIN Windows™ software
  or Run stand alone applications (Apps)
- View App data using on screen Console software
- 4 wire battery connection for remote V sense
- Integrated fully isolated USB connection to computer
- Expandable to 96 channels using simple USB hubs
- Built in variable speed fan with auto on/off
- 12 bit A/D & 12 bit D/A
- 16 Voltage auto-ranges for 1mV measurement resolution
- 3 Current ranges for a wide range of precision
- Features internal universal 120/240 VAC power supply
- Programmable audio and visual indicators
- Precise on board constant voltage and current regulation
- Multi-chemistry design for all battery types
- Many programmable options for standard tests
  or run special test routines
- Large selection of termination options
- Accuracy 0.15% full scale (V, I)
- Factory calibrated with calibration certificate
- User calibration software tools included
- On board flash memory for field upgradeable firmware
- Internal resistance measurement
- Short circuit, reverse polarity and overload protection
- Heavy duty construction

APPLICATIONS

- ► Battery charge, discharge, cycle, trickle & float
- ► Battery capacity measurement
- ► General battery testing
- ► Battery charge monitoring
- ► Battery cycling
- ► Warranty validation
- ► Quality measurement
- ► Load simulation with pulse options
- ► Battery pack commissioning
- ► Creating custom battery testing algorithms
- ► Battery fleet maintenance
- ► Battery management routines
- ► Print reports for test documentation
- ► Life cycle testing
- ► Identify under performing batteries
- ► Select batteries for critical applications
- ► Recondition battery packs
- ► Validate manufacturer's specifications
- ► Programmable battery charger or load
- ► Stand alone battery control or alarm
- ► Protection circuitry testing
- ► Battery fuel gauge initialization

MC2020 (40W)

DESCRIPTION

New for 2015 the MC line of battery analyzers offers several new important features. This line expands upon Battery Metric's history of delivering features and flexibility in a system that provides excellent performance and value..

There are several models to choose from in the MC series. Select from various voltage and current capabilities to suit your application. Models with current up to 6A and voltages up to 60V are available. Combine channels for higher current applications.

Choose from a variety of software tools to operate your Battery Metric device. Use the MC2020 device in a lab type application, a more specific test or a production application. The Battery Metric device has the flexibility to meet many battery testing and management functions.

The MC2020 is supplied with USB cable, AC power cord, built in fan, battery cables (banana plugs to alligator clips) and integrated power supply. No additional equipment or power supplies are required. Just connect the analyzer to your USB port, install the software and connect the battery.

Each MC2020 analyzer is one independent isolated channel. Create a multi-channel system by connecting more analyzers to your computer. Mix different models for added versatility. While the MC2020 is a single channel device, other models in the MC series are available in dual and quad channel configurations for cost savings.

The MC2020 features a front panel port for connecting a variety of optional battery adaptors, temperature cable and other special cable assemblies. A rear auxiliary data port is include for connecting optional digital I/O expansion module or LCD display.
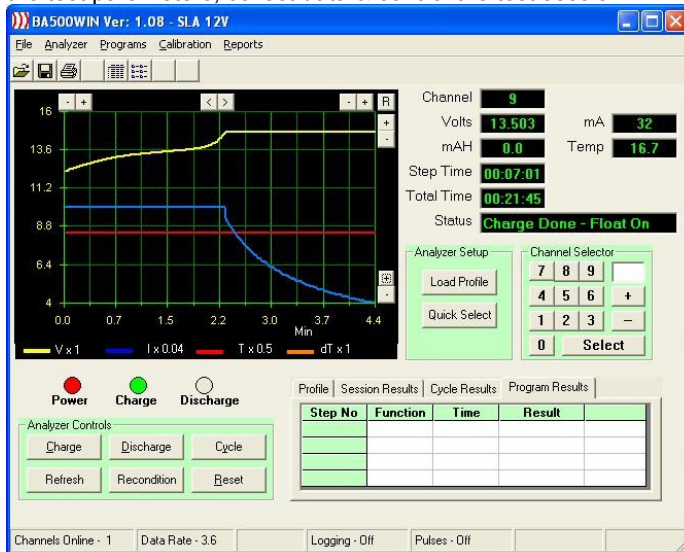
MC2020 Rear View

MC modules can run **Apps** as an alternative to using **BA500WIN**. With Apps you have even greater flexibility to control the MC module. Write a unique App using **BatteryAppMaker** software or select an App from the Battery Metric online library collection. When the App is running you can view real-time data, session progress, results, graphs and more using the on screen Console. Apps can even run your Battery Metric device in stand alone mode so no computer is required.

Use the **BatteryAppMaker** software application to write or edit a unique battery test routine. Take advantage of the powerful routing, looping and comparison functionality to meet any charge, discharge or special test function. With Battery Apps you have full control over the device's various resources to produce a unique App for a special test or application.

BA500WIN: Lab style GUI allows you to quickly & easily change the test parameters, collect data & control the test session

For frequently changing test parameters and data collection use BA500WIN. This laboratory type interface gives you real time control over the test session. Test parameters are easily created and stored in the profile database. Simply load the test profile to match your battery type and select from the on screen controls. BA500WIN also includes a Program feature for greater control or use the Quick Select options for default test parameters.
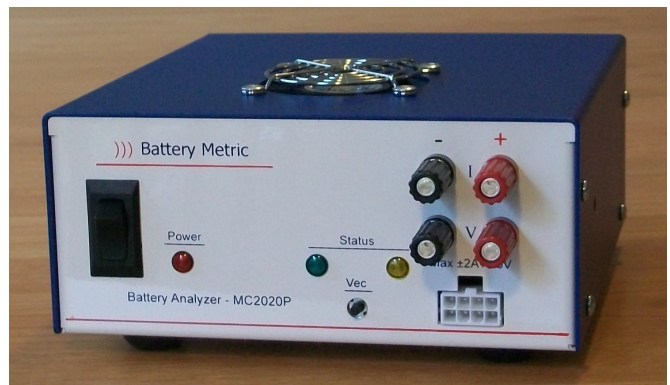
BatteryAppConsole: View Real Time and Saved Results for the running App using this on-screen console

This console is a separate software program for viewing the progress of a running App and loading new Apps. Real time data and saved data unique to the App is conveniently displayed. Includes printed reports and graphing features. This onscreen console display provides more information than you would normally find on a typical LCD display. The saved data is unique to the App can can be specified using BatteryAppMaker.

Model MC2020	Specifications
Maximum voltage	20 V
Max charge current	+ 2000 mA
Max discharge current	- 2000 mA
Current high range, 0-2000mA	1 mA resolution
Current mid range, 0-200mA	100 µA resolution
Current low range, 0-20mA	10 µA resolution
Voltage measurement	1 mV resolution
Voltage regulation	5 mV resolution
Accuracy (V,I)	0.15% FS
Input resistance	180 kΩ
Battery connection	4 Wire
Size/Weight	22x17x8 cm / 1.5 kg
Price	US $798.00

Specifications subject to change without notice.

Available from: Battery Metric, London ON Canada   1-800-673-3585