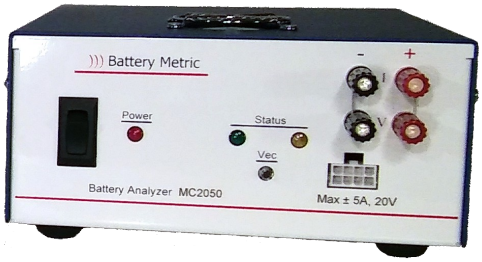
Battery Metric®

MC Series
Battery Test Modules



DESCRIPTION

The MC series battery analyzers expands upon Battery Metric's history of delivering integrated battery test systems. For performance and flexibility, the MC analyzers provide great value with a wide array of features and capabilities.

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 5A and voltages up to 40V are available.

Operate it using *Battery Console* or *BA500WIN* software for a lab type user interface. The Battery Metric device has the flexibility to meet many battery testing and management functions.

The MC analyzers are supplied with USB cable, AC power cord, built in fan, battery cables 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.

The MC series analyzers are available in single or multi-channel configurations. Each channel can be operated independently. Increase the number of channels by connecting more analyzers to your computer. Mix and match different models for added versatility. The dual and quad channel versions offer cost and space savings.

All MC series analyzers have an eight position front panel port featuring a 4 wire battery connection as well as allowing for connection of a variety of optional battery adapters, temperature cable and other special cable assemblies. Two digital I/O ports are available for external control & triggering. The single and dual channel analyzers also feature front panel banana jacks for versatility and convenience.

FEATURES

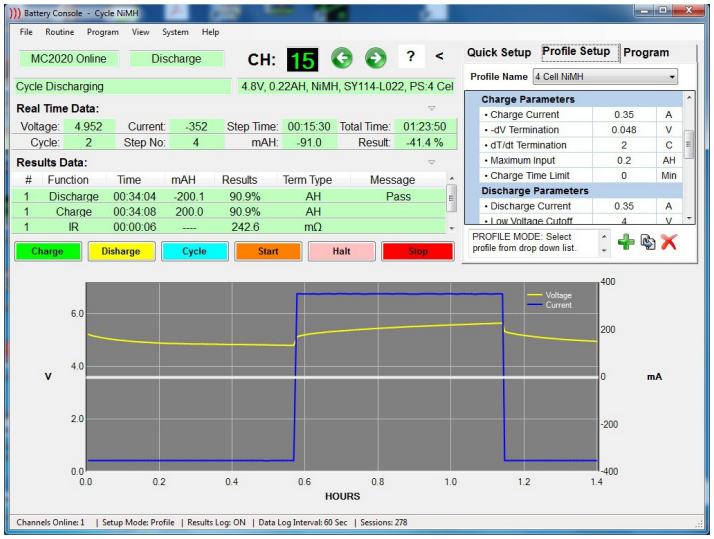
- Control with *Battery Console* Windows™ software
- 2 or 4 wire battery connection for remote V sense
- Integrated fully isolated USB connection to computer
- Expandable to 96 channels using simple USB hubs
- Built in variable speed fan with auto on/off
- 12 bit A/D & 12 bit D/A
- 16 Voltage auto-ranges for 1mV measurement resolution
- 3 Current ranges for a wide range of current precision
- Features internal universal 120/240 VAC power supply
- Precise on board constant voltage and current regulation
- Multi-chemistry design for all battery types
- Setup using saved battery profiles or run programs
- Large selection of termination options
- Accuracy 0.25% full scale (V, I), input resistance> 120kΩ
- Factory calibrated with calibration certificate
- User calibration software tools included
- On board flash memory for field firmware updates
- 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, reconditioning,
- ► Quality measurement and warranty validation
- ► Load simulation with pulse options
- ► Battery pack commissioning, fuel gauge initialization
- ► Creating custom battery testing algorithms
- ► Battery fleet maintenance
- ► Custom battery management routines
- ► Print reports for test documentation
- ► Life cycle testing
- ► Select batteries for critical applications
- ► Validate manufacturer's specifications
- ► Programmable battery charger or load tester
- ► Stand alone battery control or alarm
- ► Protection circuitry testing

Pair of MC2020-Quad channel analyzers

MC2020-Single channel analyzer



Battery Console Software Application

Battery Console is a lab style GUI application used to control the MC series analyzers. Use this interface to set up the test parameters, collect data and control the test session.

Test parameters are easily created and stored in the profile database. Simply setup and load the test profile to match your battery type and select from the on screen controls.

Battery Console also includes a Program feature for greater control or use the Quick Select options for default test parameters.

Switch between channels to view and operate each channel independently. Data can be monitored in real time as the test session proceeds. A variety of features and options allow for custom data collection and logging.

Specification	MC2020	MC2050	MC4030
Maximum Voltage (V):	20	20	40
Maximum Current (A):	+/- 2	+/- 5	+/- 3
Maximum Power (W/Ch):	40	100	120
3 Current Ranges (A):	2 • 0.2 • 0.02	5 • 0.5 • 0.05	3 • 0.3 • 0.03
Current Resolution(mA):	1 • 0.1 • 0.01	2 • 0.2 • 0.02	1 • 0.1 • 0.01
Voltage Measurement Resolution (mV):	1	1	2.5
Voltage Regulation Resolution (mV):	5	5	10
Accuracy V, I (%FS):	0.25	0.25	0.25
Size (cm) Single:	20x25x10	20x25x10	20x25x10
Weight (kg) Single:	2.0	3.6	3.6
Price Single (1Ch) USD	$1397	$2972	$3234
Price Dual (2Ch) USD	$2618	$5572	$6064
Price Quad (4Ch) USD **	$4887	—	—

All units have USB isolation. Channel isolation in multi-channel units is available as an additional option. Specifications subject to change without notice.
**For 20V Quad, Max Charge current may be reduced at low voltages. Order MC1020-Quad(10V,+/-2A) if batteries are less than 10V. ex 1.5V or 3.7V

Dual: 4.0kg, 31w x 25d x 10h cm Quad:4.0kg, 26w x 31d x 10h cm Input Resistance > 100K Ω