







ATEQ BCA

Battery Charger Analyser

(75 V - 40 Amps or 48 V - 60 Amps versions)





- → USER FRIENDLY INTERFACE
- → 1 UNIT FOR 2 BATTERIES (only for BCA 75 V 40 Amps)
- External Voltage measurement
- → Up to 24 cells monitoring
- Computer Management System available





MCMS SOFTWARE FEATURES

FUNCTION	CHARACTERISTICS
Charging phase	- Constant or variable Intensity/Voltage - Adjustable from PC, profile, EXCEL file - On I constant, or variable, limit U max, ΔV , time, temperature min and max, $\Delta T^{\circ}/\Delta t$ - On U constant, or variable, limit I min, times ΔI (%), temperature min and max, $\Delta T^{\circ}/\Delta t$ - Temp. protection probe type K, adjustable - Elements voltage measurements and stop or stand by on elements voltage
Discharging phase	 Constant or variable Intensity Adjustable from PC, profile, EXCEL file U min limit, time, temp. min and max, ΔΤ°/Δt Temp. protection probe type K, adjustable Elements voltage measurements and stop or stand by on elements voltage Automatic deep discharge
Stand by phase	- Stand by period adjustable from PC
Cycle	- Choice of phases totally adjustable from PC - In chronological order or according to conditions - Repeat cycles - Sequence of cycles with different phases
Status of channels	- Permanent display of battery status, colour code
Status of test	- Permanent display of data regarding current phase
Errors message and observations	- Error message display - Automatic storage of all errors during test - Send by email: errors, observations, message
Blank play	- Check up of all contacts before test lanch
Pause, Stop	- Possibility to pause/stop during the test
Delayed or immediate start	- Select time and date for test start
Results	- Data on test performed and tested battery - Plan voltage, intensity, temperature - Restored or absorbed capacity (% and Ah) - Voltage, Intesity and temperature at the beginning and at the end of phase - Events happened during the selected phase - Voltage of each battery elements - Average, Min and Max of element voltage
Phase filing	- Automatic filing at the end of each phase (all data, history traceability) - Save current data if error encountered - Archives in network - Consultation of archives between different benches
Print	- Automatic print of results at the end of test - Print on demand of the result of one battery for one phase (modification of axes available) - Possibility to print voltage acquisitions
Display	 Display of I, U, T° for each channel in test Display zoom on curves Display of each channel in test results Display of elements tension
Intermittent	- Choice of step between prints in automatic mode printing
Inverter	- Protection and saving of all data during power cut
Alarm	- Buzzer for check-up level of electrolyte, temperature defect
Element voltage	- Individual measurement of each battery element voltage
	T TVCTI

- To EXCEL

Export data

DESCRIPTION

Rotary selector: Touch Screen Display & Rotary selector will ease the process to select/start the test programm

Test parameters can be modified in real time without having to stop the test program



MAIN FEATURES

2 Batteries in charge mode (only for BCA version 75 V - 40 Amps) Main powers available are indicative ones

(Voltage and intensity in charge and discharge on each channel can be adapted upon request)

Immediate or delayed test start

Control of voltages under 16 bits

Temperature Measurement with type K thermocouples

Alarm for electrolyte level

Shut down at predefined voltages Min, Max or delta V

Shut down as a function of time - Protection against temperature defect $% \left(1\right) =\left(1\right) \left(1\right) \left($

Set up of multiple cycles and / or sequences $% \label{eq:cycles} % \label{eq:cycles}$

Printing and automatic filing of data at the end of the test

 $\label{eq:decomposition} \mbox{Data protection and results saving and backup in case of power shutdown}$

Test result storage and research by user defined criteria

Curves drawing per phase

7 Inch Touch screen color display

Temperature measurement with thermocouple sensor Type K

Charge & discharge main plug type Anderson

24 cells voltage measurement

Languages: Chinese, English, French, Russian

Computer connections: USB port, RS485

Fuse protection kit

OPTIONAL

Connection systems for battery elements voltage, measurement or deep discharge $\,$

ELECTRICAL SPECIFICATIONS

General Electrical characteristics

Sector input:	100-240 VAC Monophased
Frequency:	50-60Hz
Temperature of use:	0-50°C (0-20°C without derating)
Storage temperature:	-20 to +70°C
Cooling:	By forced ventilation
PN EZ-0232 version:	Dimension: 380 x 440 x 265 mm
	Weight: ~26 kg

Power supply characteristics at constant voltage (charging)

Output voltage:	0-75 VDC per channel 0-48 VDC per channel
Regulation:	0.1 % for a variation of I from 10 to 90 %
Stability:	0.1 % at full charge for 8H
Accuracy:	0.1 % reading or +/- 25 mV

Power supply characteristics at constant current (charging)

Output current:	0-40 ADC 0-60 ADC
Regulation:	0.1 % for a variation of U from 10 to 90 %
Stability:	0.1 % at full charge for 8H
Accuracy:	0.2 % reading or +/- 100 mA

Characteristics of the electronic charge (discharging)

Max Power:	1750 W
Absorbed current:	0-60 ADC
Max voltage accepted:	75 VDC 48 VDC
Regulation in constant current:	0.1 % for a variation of U from 10 to 90 %
Stability:	0.1 % at full charge for 8H
Accuracy:	0.2 % reading or +/- 100 mA

Gauge input characteristics

Voltage Measurement

Range	Accuracy
+/- 75 VDC +/- 48 VDC	+/- 0.05 % Max of reading (+-20 mV)

Current Measurement

Range	Accuracy
+ 60 ADC	+/- 0.2 % of reading or +/- 100 mA $$

Cell voltage - 24 cells (Option)

Range	Accuracy
+/-10 VDC	+/- 0.005 V

Auxiliary Input Voltage (AutoRange)

Range	Accuracy
+/- 75 VDC +/- 48 VDC	+/- 0.05 % Max of Reading or +/- 10 mV

Temperature (Option)

Range	Accuracy
0 to 100 °C (type K thermocouple sensor)	+/- 5°C (apart from sensor)

BCA version 48 Volts / 60 Amps

- 48 Volts max charge and discharge
- 60 Amps max charge and discharge
- Single Battery Charge for 48-60 mode

AVAILABLE ACCESSORIES

[EC-0326] Rebling © 7007 plug

[EC-0528] Counter-plug Rebling © 7007

[EC-0551] Aligator clip kit for battery cell connection (25 pieces)

[ED-0073] Thermocouple probe type K - 6m

[EG-0400] External probes for Voltage measurement (Black and Red 4mm²)

[EG-0701] USB Type A to Mini USB - 1.8m

[EZ-0191] Deep Discharge Function (No Cable Include)

[L2-0010] MCMS - Multi Channel Management Software

[L2-0013] SCSS - Single Channel Setting Software

[MD-0053] M8 Spacers kit for battery cells connection (25 pieces)

[MD-0054] M10 Spacers kit for battery cells connection (25 pieces)

[MD-0055] M12 Spacers kit for battery cells connection (25 pieces)

[T1-0034] BCA Power ouptut cable - 3.5 m - 2x16mm² + 2x0.5mm² -

GRID GPE80 to Eyelet M8

[T1-0043] Cable RS485 SubD 9 pins Male to female - 1.8m

[T1-0106] BCA USB to RS485 sub-D9 - cable 5m

[T1-0132] BCA Power ouptut cable extension- 2m - 2x16mm² + 2x0.5mm² -

GRID GPE80 to GRID GPE80

[T1-0211] BCA Dual connector Battery cable - 2x 16mm 2 - 2 x 0.5mm 2 - 2m -

GRID GPE80 to REBLING-REBLING ©

[T1-0217] BCA Cell measurement cable 24 cells - 3.5m -

Souriau 26 pin to Banana plugs

[T1-0268] BCA Cell measurement cable 24 cells - 3.5m -

Souriau 26 pin to DB25

[T1-0309] BCA Power ouptut cable - 2m - $2x16mm^2$ + $2x0.5mm^2$ -

GRID GPE80 to Eyelet M8

As a sum up

The BCA is a Battery Charger Analyzer designed to Charge, Discharge and Analyze all types of battery chemistry in the Aviation industry.

It is housed in a metal enclosure with a 7 inch touchscreen control display.

All settings and data can be entered via the touchscreen.

It is a very easy-to-use and versatile instrument that comes in 2 versions the BCA 75 Volts / 40 Amps or the BCA 48 Volts / 60 Amps.

he BCA 75 Volts / 40 Amps can charge two batteries

BCA version 75 Volts / 40 Amps

- 75 Volts max charge and discharge
- 40 Amps max charge
- 60 Amps max discharge
- Charging 2 batteries 37.5 Volts each max

AVAILABLE ACCESSORIES



[ED-0073] Thermocouple probe type K-6m



[MD-0053] M8 Spacers kit for battery cells connection (25 pieces)



[MD-0054] M10 Spacers kit for battery cells connection (25 pieces)



[MD-0055] M12 Spacers kit for battery cells connection (25 pieces)



[EC-0551] Aligator clip kit for battery cell connection (25 pieces)



[T1-0034] BCA Power ouptut cable $-3.5 \text{ m} - 2x16\text{mm}^2 + 2x0.5\text{mm}^2 - \\ \text{GRID GPE80 to Eyelet M8}$



[T1-0309] BCA Power ouptut cable $-2m - 2x16mm^2 + 2x0.5mm^2 -$ GRID GPE80 to Eyelet M8



[T1-0269] BCA Power ouptut cable
- 5 m - 2x16mm² + 2x0.5mm² GRID GPE80 to Eyelet M8



[T1-0132] BCA Power ouptut cable extension- $2m - 2x16mm^2 + 2x0.5mm^2 -$ GRID GPE80 to GRID GPE80



[T1-0217] BCA Cell measurement cable 24 cells - 3.5m -Souriau 26 pin to Banana plugs



[T1-0375] BCA Cell measurement cable 24 cells - 10m -Souriau 26 pin to Banana plugs



[EC-0326] Rebling © 7007 plug



[T1-0272] BCA Power ouptut cable extension- $5m - 2x16mm^2 + 2x0.5mm^2 -$ GRID GPE80 to GRID GPE80



[T1-0268] BCA Cell measurement cable 24 cells - 3.5m -Souriau 26 pin to DB25



[T1-0376] BCA Cell measurement cable 24 cells - 10m -Souriau 26 pin to DB25



[EC-0528] Counter-plug Rebling © 7007 (Counter-plug used in case of charging only one battery with cable T1-0211)





[T1-0211] BCA Dual connector Battery cable - 2x $16mm^2$ - $2 \times 0.5mm^2$ - 2m - GRID GPE80 to REBLING-REBLING (EC-0528 Counter-plug mandatory in case of charging only one battery). Not included



[EG-0400] External probes for Voltage measurement (Black and Red 4mm²) - 1.5m



[L2-0010] MCMS - Multi Channel Management Software



[L2-0013] SCSS - Single Channel Setting Software



[T1-0043_3m] Cable RS485 SubD 9 pins Male to female - 3m



[T1-0043] Cable RS485 SubD 9 pins Male to female - 1.8m



[T1-0106] BCA USB to RS485 sub-D9 - cable 5m



[EG-0701] USB Type A to Mini USB - 1.8m

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