



Electrical Energy Storage Tester

**EEST
42-60-I**

**Computerized test bench
for maintaining batteries
Hot standby system**

Maintenance, training, agreement, batteries certification...



Battery tester series

*1 to 12 channel automatic cycling bench
All batteries type Ni-Cd – Pb - Ni-Mh - Li-ion ...*

Linear technology



Mains Characteristics

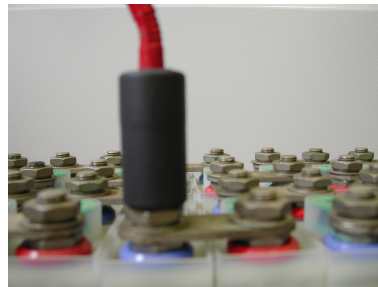
• 1 to 12 channels of charge/discharge 42 V/60A

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.
- Cut at predefined voltages Min, Max or delta V.
- Cut as a function of time – Protection against temperature defect.
- Set up of multiple cycles and / or sequences
- Functioning in "local" mode, electronic management, if IT failure.
- Possibility of deporting the PC out of the batteries place.
- Printing and automatic filing of data at the end of the test.
- Protection –data and results saving and backup in case of power cut.
- Test result storage and research by user defined criteria.
- Curves drawing per phase.



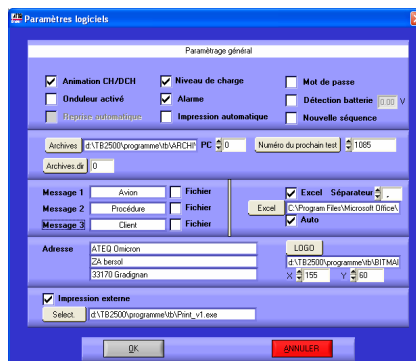
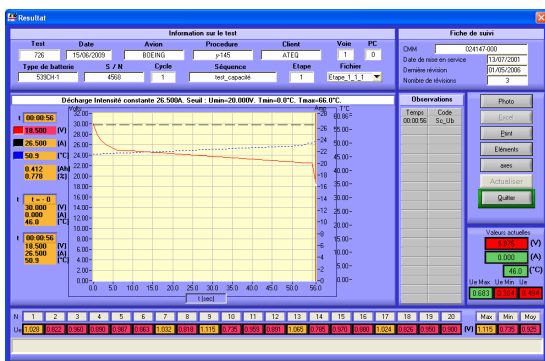
Option: Connection systems for battery elements voltage, measurement or deep discharge



Option: isolation tester – Megohmmeter



Software interface



15, rue des Dames - ZI des Dames - 78340 Les Clayes-Sous-Bois - France
 ☎ : + 33 (0)1 30 80 10 20 - Fax : + 33 (0)1 30 54 11 00 - e-mail : info@ateq.com
 www.ateq.com

EEST 42-60-I: 1 to 12 channels of independent measures

| FUNCTION | Characteristics (● :Standard, ○ :Option) | | FUNCTION | Characteristics (● :Standard, ○ :Option) | |
|---|--|---|-------------------------------|--|---|
| Channel selection | Selection of one channel available even if others are in use | ● | | Voltage, Intensity and temperature at the beginning and at the end of phase | ● |
| 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 et Max, ΔT°/Δt On U constant, or variable, limit I min, times, ΔI (%), temperature min et max, ΔT°/Δt temperature protection probe type K, adjustable Elements voltage measurements and stop or stand by on elements voltage | ● | Results | Events happened during the selected phase | ● |
| | | ○ | | Voltage of each battery elements | ○ |
| Discharging Phase | Constant or variable Intensity, profile, EXCEL file. U min limit, time, Temperature min and Max, ΔT°/ Δt, adjustable from PC temperature protection probe type K, Elements voltage measurements and stop or stand by on elements voltage Automatic deep discharge | ● | Phase filing | Automatic filing at the end of each phase (all data, history => traceability) | ● |
| | | ○ | | Save current data if error encountered | ● |
| Stand by phase | Stand by period adjustable from P.C | ● | Print | Archives in network | ● |
| | | ○ | | Consultation of archives between different benches | ● |
| Cycle | Choice of phases totally adjustable from PC In chronological order or according to conditions Repeat cycles Sequence of cycles with different phases | ● | Display | 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) | ● |
| Status of channels | Permanent display of battery status, colour code | ● | | Possibility to print voltage acquisitions | ○ |
| Status of test | Permanent display of data regarding current phase | ● | Intermittent printing | Display of I, U, T° for each channel in test | ● |
| | | ○ | | Display zoom on curves | ● |
| Errors, messages and observations | Error message display Automatic storage of all errors during test send by email: errors, observations, message | ● | Inverter | Display of each channel in test results | ● |
| | | ○ | | Display of elements tension | ○ |
| Blank play | Check up of all contacts before test launch | ● | Alarm | Choice of step between prints in automatic mode | ● |
| | | ○ | | Protection and saving of all data during power cut | ○ |
| Pause, Stop Delayed or immediate start | Possibility to pause/stop during the test Select time and date for test start | ● | Custom-designed | Software of piloting and acquisitions (reception, statistics, curves upon request) | ○ |
| | | ○ | | CMM programming | ○ |
| Results | Data on test performed and tested battery plan voltage, intensity, Temperature, Restored or absorbed capacity (% and Ah) | ● | Elements voltage | Power adjustable on request | ○ |
| | | ○ | | Individual measurement of each battery element voltage | ○ |
| | | ● | Re-balancing Isolation | Deep discharge or re balancing test | ○ |
| | | ○ | | Automatic isolation measurement | ○ |
| | | ● | Export data | to EXCEL. | ● |