

Electrical Energy Storage Tester

**EEST
35-130-I**

**Module Voltage Balancing device
for Battery modules**

**Maintenance, training, agreement, batteries certification...
Li-ion, LMP, Li-po, Ni-cd, Pb, NI-MH...**



Battery tester Serie

1 to 12 channel automatic cycling bench

Linear technology

Mains Characteristics

- 1 to 12 channels of charge/discharge 35 V / 130 A

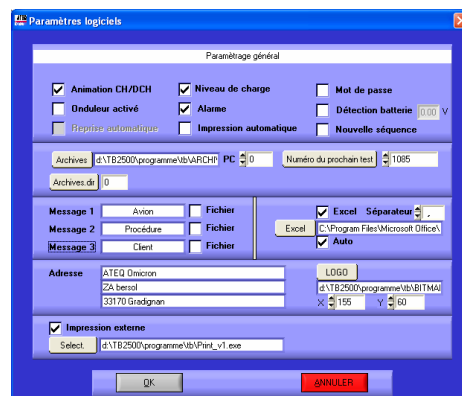
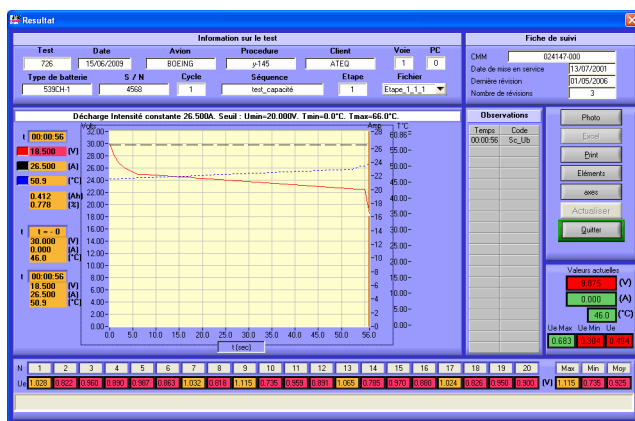
Main powers available are indicative ones (Voltage and intensity in charge and discharge on each channel can be adapted upon request)

- 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.
- 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: impedance measurement



Software interface



EEST 35-130-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	○	
		○	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	●	
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	●	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	○	
		○				
Stand by phase	Stand by period adjustable from P.C	●	Display	Display of I, U, T° for each channel in test	●	
Cycle	Choice of phases totally adjustable from PC In chronological order or according to conditions Repeat cycles Sequence of cycles with different phases	●			Display zoom on curves	●
		●			Display of each channel in test results	●
		●			Display of elements tension	○
Status of channels	Permanent display of battery status, colour code	●	Intermittent printing	Choice of step between prints in automatic mode	●	
Status of test	Permanent display of data regarding current phase	●	Inverter	Protection and saving of all data during power cut	○	
Errors, messages and observations	Error message display Automatic storage of all errors during test send by email: errors, observations, message	●	Alarm	Buzzer for check-up level of electrolyte, temperature defect	●	
		●	Custom-designed	Software of piloting and acquisitions (reception, statistics, curves upon request)	○	
Blank play	Check up of all contacts before test launch	●		CMM programming	○	
				Power adjustable on request	○	
Pause, Stop	Possibility to pause/stop during the test	●	Elements voltage	Individual measurement of each battery element voltage	○	
Delayed or immediate start	Select time and date for test start	●	Re-balancing	Deep discharge or re balancing test	○	
			Isolation	Automatic isolation measurement	○	
Results	Data on test performed and tested battery plan voltage, intensity, Temperature, Restored or absorbed capacity (% and Ah)	●	Export data	to EXCEL.	●	
		●	Impedance	Impedance measurement and data recording	○	