ATEQ omicron

EUROSCAN
EEST-5XX

BATTERY CHARGE / DISCHARGE
TEST BENCH

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1 to 8 channels automatic cycling bench
All Battery Types (Ni-Cd - Pb - Ni-Mh - Li-ion)

LINEAR TECHNOLOGY

8 Channels automatic bench

Single Channel automatic bench

Main Characteristics

- **1 to 8 channels for charge / discharge**
- **Main powers available (Voltage and intensity in charge and discharge on each channel)**
  - o **42 Volts / 60 Amperes**
  - o **50 Volts / 50 Amperes**
  - o **50 Volts / 100 Amperes**
  - o **30 Volts / 10 Amperes**
  - o **Further powers 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 -ΔV.**
- **Cut as a function of time – Protection against temperature defect.**
- **Set up of multiple cycles and / or sequences**
- **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.**
- **Chart drawing per phase.**

Options :

- **Individual element voltage measurement**
- **Deep discharge module**
- **Isolation test (Megohmeter)**
- **Uninterrupted Power Supply**

Function	Characteristics (○:Standard, ● :Option)	
Channel selection	Selection of one channel available even if others are in use	○
Charging phase	Constant or variable Intensity/Voltage, adjustable from PC	○
	Measure frequency adjustable	○
	Intensity profile, on time, battery tension level and elements tension	●
	Voltage profile, on time, intensity level.	○
	End of phase adjustable from P.C:	○
	On elements voltage	●
	On constant or variable intensity mode *On Umax, - DeltaV, Time, temp min or max, deltaT°/dt*	○
	On constant or variable volatge mode *On Imin, ΔI(%), time, temp min or max, ΔT°/dt*	○
Discharging phase	Constant or variable intensity	○
	Measure frequency adjustable	○
	Automatic deep discharge	●
	Intensity profile, on time, battery voltage level and elements voltage	●
	End of phase adjustable from PC:	○
	On Umin, time, temperature min and max,	○
	On elements voltage	●
Stand by phase	Stand by period adjustable from P.C	○
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/batteries	Permanent display of battery status, colour code	○
Status of test	Permanent display of data regarding current phase	○
Error management	Display error message	○
	Automatic storage of all errors during test	○
	Sending by mail of errors/observations/messages	○
Blank play	Check up of all contacts before test launch	○
Pause, Stop	Possibility to pause/stop during the test	○
Delayed or immediate start	Select time and date for test launch	○
Results	Data on test performed and tested battery	○
	Plan of battery Voltage f(t)	○
	Plan of intensity f(t)	○
	Plan of temperature curve	○
	Voltage, Intensity and temperature of beginning and end of phase	○
	Delivered Intensity (%) and capacity on discharge phase	○
	Events happened during the selected phase	○
	Voltage of each battery elements	●
	Average, Min and Max of elements voltage	●

Function	Characteristics (○ :Standard, m :Option)	
Phase filing	Automatic filing at the end of each phase (all data, history => traceability)	○
	Save current data if error encountered	○
	Export to Excel	○
	Archives in network	○
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 of non-programmed elements	●
	Display of channel result/one test phase	○
	Display of I, U, T°for each channel in test	○
Display	Display of each channel in test results	○
	Display of elements tension	●
	Dynamic zoom on curves	○
Intermittent printing	Choice of gap between prints in automatic mode	○
Alarm	Buzzer for check-up level of electrolyte, temperature defect	○
U.P.S.	Protection and saving of all data during Power cut	●
Elements	Individual measurement of each battery element voltage, possibility to validate an alarm/or pause if elements are out of gap, phase changement on element voltage condition, S.N data entry	●
Voltage Re-balancing	Main discharge, or re-balancing test.	●
Isolation	Isolation measurement in automatic mode	●
Export data	Towards other software (EXCEL...)	○
	Software for control and acquisition (control	
Custom-designed	Reports, graphs matching the requirements of the customer)	●
Charge/Discharge phase	Cut on temperature increase in relation of time, in charge and discharge, (Dt/dt)	○
Forbidden launch	Adjustable	○
Specialized channels	For Emergency batteries for example, same as main aircraft batteries but without temperature acquisition.	●

Screenshots of software interface
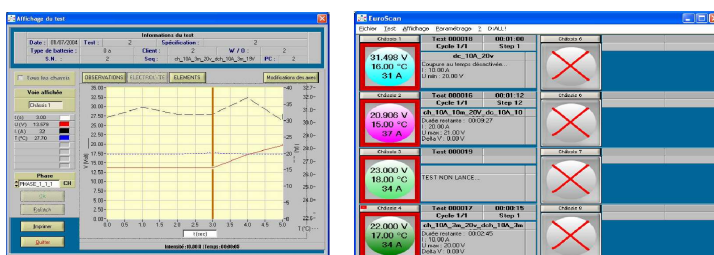
Options: Connection systems for battery elements voltage, measurement or deep discharge

Lids or Sockets

Option :Megohmeter