

Datalog Controls and Solutions Pvt. Ltd.

.....A team for real time Data Acquisition



DATALOG CONTROLS AND SOLUTIONS PVT LTD

Plot no: 196, Phase – II, IDA, Cherlapally.

HYDERABAD

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About Datalog Controls

Datalog Controls and Solutions was established in the year 1998 with an objective of developing indigenous Test and data acquisition solutions. Over the two decades, **Datalog** has pioneered the design and development of complex missile battery test systems, electronic load banks, High Power DC sources, automated test setups and so on.

Being an ISO 9001:2008 Certified organization, **Datalog** has been involved in the successful development of many customized solutions to various defence establishments, PSUs and the Private Industry.

With an excellent manufacturing facility, **Datalog** is empowered by its highly qualified team of engineers in the research and development, takes up highly challenging and complex tasks for the defence, military, railways and the industry.

PRODUCTS...

- **Load Banks**

- **Electronic Loads**

- **Resistive Loads**

- **Inductive Loads**

- **Battery Chargers**

- **Battery Packs**

- **Test Systems**

- **Power Supplies**

- **MIL Grade DC-DC Converters**

- **Others**

Instant Battery Test System

Salient Features:

- Micro controller based battery tester
- Portable and suitable for field testing
- Menu driven software
- ✓ Current programmable through LCD display
- No need of external power supply
- Operates on battery
- Reverse protection
- Low voltage & high voltage cut-off
- ✓ Voltage and Current monitored on LCD display
- Data storage in USB
- Application software for Data analysis
- ✓ LCD and keypad Interface



Automated Test Equipment

Salient Features:

- Designed to test/define electrical performance Characteristics of SMPS based AC to DC switching adaptors. Operates in universal AC range
- Capable of performing various tests on 4 adaptors simultaneously
- I/P through a controlled servo stabilizer & isolation step-up transformer for i/p AC simulation
- Micro controller based Electronic load bank for output DC load simulation
- User friendly Application Software
- Online voltage, current display through digital meters
- Test pass or fail indication through front panel LEDs
- Audio alarm for test pass or fail indication
- Can be configured R&D, production
- Quality control test setup
- Test Performed:
 - ❖ Full Load Test at Min AC, Max AC, Nominal AC
 - ❖ No Load Test at Nominal AC
 - ❖ Short Circuit Test
 - ❖ AC ON and OFF Test
 - ❖ Fold Back Test
 - ❖ Input Over Voltage
- Online serial number allocation and sticker printing



Thermal Battery Test System

Salient Features:

- Designed to test fire the thermal batteries used in missiles
- Programmable Configurable load control
- High precision programmable current pulse ignition
- Squib firing electronics for testing Squib/Pyros for all-fire and no fire
- Précised data acquisition
- Dedicated application software package
- Graphical and Tabular representation of results



SMPS Ageing Setup

Salient Features:

- Designed to carry out ageing test on multi output SMPS modules
- Capable of loading 30 Multi o/p SMPS modules simultaneously
- Continuous monitoring the condition of each section of the SMPS
- Raises an alarm (LED or BUZZER) on fault detection
- The ageing hot chamber maintains temp level
- Modular construction
- Easy to disconnect the SMPS modules
- Programmable load current for each section
- Voltage and current display for each section of the SMPS
- Protected against SHORT CKT & REVERSE POLARITY
- Soft start and delayed switching ON of SMPS to reduce inrush current
- Source connected for each section of SMPS
- Reverse Polarity (Audio & Visual)
- Power On, Load On, Ageing chamber temperature indicator



EV Charger Ageing Chamber

Salient Features:

- Design to perform ageing test on EV Battery chargers
- In-built thermal chamber with settable temperature limits
- Temperature range: 30°C-55, $\pm 2^{\circ}\text{C}$
- Input: 450V AC
- 30 EV chargers can be tested at one go
- Charge voltage 24V and 48V
- Current 30A, in steps of 1A, 2A, 5A & 10A
- Indications: I/P AC Voltage, Current and Temp



Primary Automated Test Equipment

Salient Features:

- Designed to test/define electrical performance Characteristics of SMPS based AC to DC switching adaptors
- Capable of performing various tests on 4 adaptors simultaneously
- Micro controller based control Electronics
- Test pass or fail indication through front panel LEDs
- Audio alarm for test pass or fail indication
- Can be configured R&D, production
- Quality control test setup
- Test Performed:
 - ❖ Full Load Test at Min AC, Max AC, Nominal AC
 - ❖ No Load Test at Nominal AC
 - ❖ Short Circuit Test
 - ❖ AC ON and OFF Test
 - ❖ Fold Back Test
 - ❖ Input Over Voltage



Automated Charge Setup

Salient Features:

- **automated Charge Setup for AgOZn Batteries**
- **Five independent modules to cater to five batteries simultaneously**
- **Each module capable of acquiring cell voltages of up to 23 cells**
- **Monitors and acquires individual cell voltages, total battery voltage and battery current**
- **Designed jig fixtures for each type of the battery**
- **Gold plated spring contact pins for each cell voltage monitoring**
- **User interactive GUI based application software**
- **Flexible test configuration wizard**
- **Programmable individual cell cut - off limits**
- **Pause and resume facility**
- **Automatic test resumption on power failure and retrieval**
- **Programmable sampling rates, based on end voltage**
- **Auto test cut - off based on end voltage**
- **Graphical and tabular representation of the acquired data**
- **Online display of test parameter**



Life Cycle Tester

Salient Features:

- **Designed to meet BIS standards for cycle testing of various batteries**
- **capable of performing Charge and Capacity test**
- **Perform Charge test in Constant Current and Constant Voltage**
- **Instant charge over from Charge to Discharge or vice versa**
 - **Individual cell monitoring**
 - **User friendly Application software**
 - **Battery temperature and AH monitoring**
 - **Graphical and Tabular representation of results**



Battery Analyzer Kit

Kit includes:

1) Beta Tester (6V-120AH):

- Portable and suitable for field testing and capacity assessment of battery
- Microcontroller based battery analyzer kit
- Suitable for 6V/120AH batteries
- Voltage and current readings through 20x4 LCD
- Data storage in USB
- Trolley mounted for easy movement (Portable)
- Over voltage and reverse polarity protections
- Less power consumption
- Application software for data extraction, display and print in report format

2) Cell Booster (15V-50A):

- Application for battery charging purposes
- CV/CC selection through toggle switch
- Very compact in size
- Output over load, over voltage, reverse polarity & short-circuit protection
- Digital panel meters for voltage and current display
- Wide input range and highly efficient



Automated Test Equipment

Salient Features:

- Designed to test/define electrical performance Characteristics of SMPS based AC to DC switching adaptors
- Capable of performing various tests on 4 adaptors simultaneously
- Online voltage, current display through digital meters
- Test pass or fail indication through front panel LEDs
- Audio alarm for test pass or fail indication
- Can be configured R&D, production
- Quality control test setup
- User friendly Application Software
- Online serial number allocation and sticker printing
- Test Performed:
 - ❖ Full Load Test at Min AC, Max AC, Nominal AC
 - ❖ No Load Test at Nominal AC
 - ❖ Short Circuit Test
 - ❖ AC ON and OFF Test
 - ❖ Fold Back Test
 - ❖ Input Over Voltage



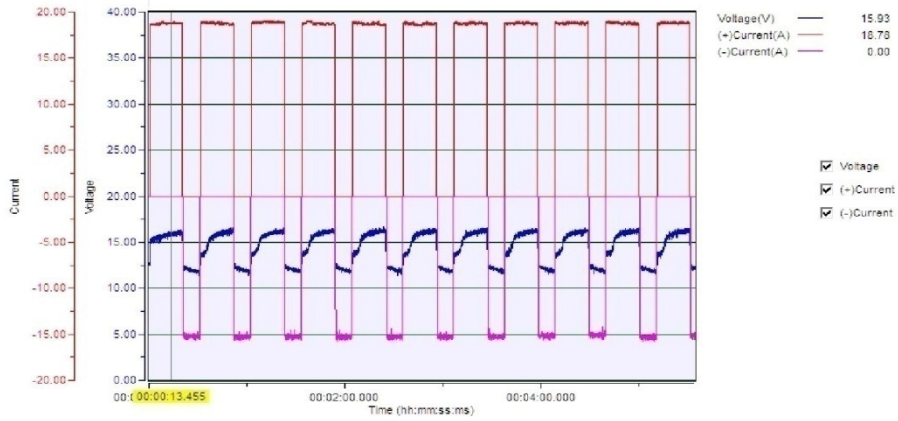
Research Center Imarat
Multi Battery Intelligent Charger

(Burp/Rapid Charger)

Test File : 9911201711
Config File : chdisch

Battery Type : s
Battery No. : 2

Test Date : 9/11/2017
Test Time : 17:26:14

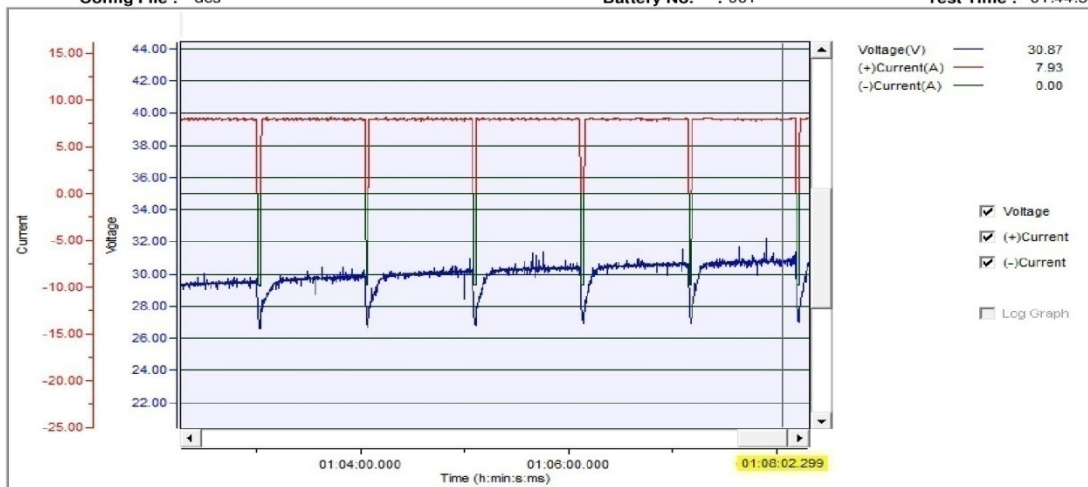


Research Center Imarat
Multi Battery Intelligent Charger

Test File : dcs13t5
Config File : dcs

Battery Type : Secondary
Battery No. : 001

Test Date : 12/10/2015
Test Time : 01:44:56



I-CHARGER

Salient Features:

- **Intelligent tool for complete battery maintenance**
- **Microcontroller based battery analyzer**
- **SMPS Based Charger**
- **Multi step constant current charge**
- **Custom made jig for individual cell accessing**
- **Dedicated data acquisition module for individual cell monitoring, Performs capacity test**
- **Rapid / Burp charge for quick charging**
- **Programmable end limits for Charge/Discharge**
- **AH Computation and display**
- **Charge /Discharge configuration based on the type of battery**
- **Programming through LCD and Keypad**
- **Suitable for Ni-cd, AgOZn and lead –acid batteries**
- **Optional PC interface through RS 232 with user friendly GUI for data logging**
- ✓ **SUCCESSFUL FIELD TRIALS ON SU-30 MKI, TU-142-M, DORNIER & CHETAK BATTERIES**
- ✓ **RCMA Approved Specifications**



BATTERY ANALYZER KIT

Kit includes:

1) Beta Tester (2V-1200AH):

- **Portable and suitable for field testing and capacity assessment of battery**
- **Microcontroller based battery analyzer kit**
- **Suitable for 2V/1200AH batteries**
- **Voltage and current readings through 20x4 LCD**
- **Data storage in USB**
- **Trolley mounted for easy movement (Portable)**
- **Over voltage and reverse polarity protections**
- **Less power consumption**
- **Application software for data extraction, display and print in report format**

2) Cell Booster (15V-120A):

- **Application for battery charging purposes**
- **CV/CC selection through toggle switch**
- **Very compact in size**
- **Output over load, over voltage, reverse polarity & short-circuit protection**
- **Digital panel meters for voltage and current display**
- **Wide input range and highly efficient**



Igniter Test System

Salient Features:

- Designed to test fire the Squib used in missiles
- Programmable Configurable load control
- High precision programmable current pulse ignition
- Squib firing electronics for testing Squib/ Pyros for all-fire and no fire
- Précised data acquisition
- Dedicated application software package
- Graphical and Tabular representation of results



Cable Harness Junction Box Tester

Salient Features:

- Designed to test Junction boxes
- Programmable Configurable load control
- Diode Testing (1 or 2 or 3) Configurable
- Continuity testing
- To identify poor crimping by measuring the voltage drop across the junction box
- Testing of four JBs simultaneously
- Automatic allocation of serial numbers and sticker printing



Fuel Cell Test Station

Salient Features:

- **Designing for testing Mass flow Cell Stack**
- **H2 flow and Air/O2 flow through suitable programmable mass flow controllers**
- **Displayed Digital flow rate**
- **N2 purging facility**
- **Line Temperature Controller for both H2, O2**
- **H2 & O2 Humidification:**
0 to 150 °C (or) 70 to 100%RH
- **Two suitable Electronic loads provided**
 - 1) 0-60V, 0-100A, 600W
 - 2) 0-120V, 0-200A, 5000W
- **Provisions for run the FCT in: Constant Current mode, Constant Voltage mode, Constant Resistance mode, Constant Power mode**
- **Cell can run Mode in: Activation mode, Dynamic mode, Static mode**
- **RS232 & RS485 Provisions through Remote Operation**
- **Indications: Voltage, Current, Output ON, Test On, Test Over**
- **All parameters displayed on the screen**
- **Limits: Temperature cut off, Voltage and current Cut off**
- **Voltage and current display through digital Voltmeter and Ammeter**
- **Voltage and Current programmable sample rate with software**



Instant Battery Tester (3.6V/40A)

Salient Features:

- **Micro controller based battery tester**
- **Portable and suitable for field testing**
- **Menu driven software**
- **No need of external power supply**
- **Operates on battery**
- **Reverse protection**
- **Low voltage & high voltage cut-off**
- ✓ **Voltage and Current monitored on LCD display**
- **Data storage in USB**
- **Application software for Data analysis**
- ✓ **LCD Interface**





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