Accelerated Corrosion Test Apparatus -8 Channel with DAQ Software

MODEL: VSLIC-C258 | MAKE: VERTEX

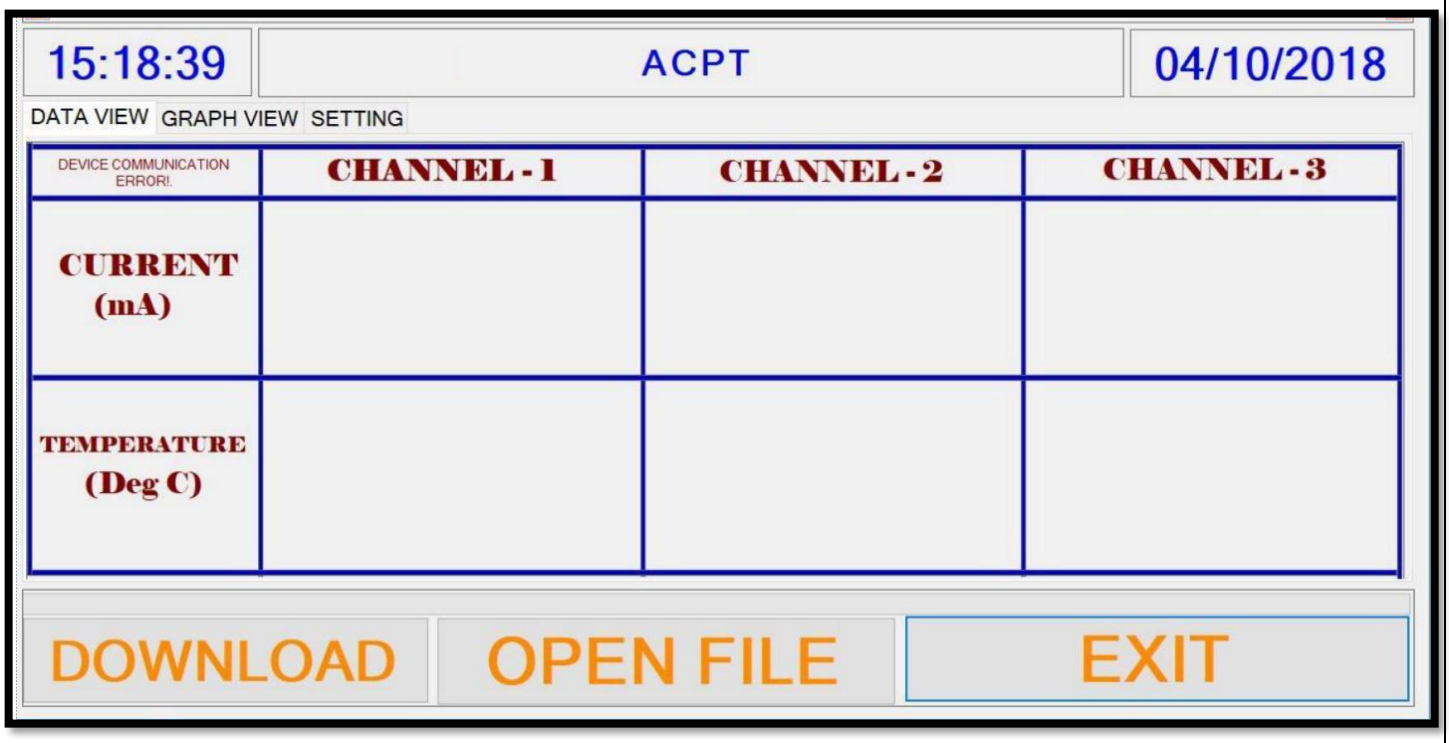
Product Overview.

- The DC power supply for all the 8 cells 0 to 12 volt continuously.
- The DC supply is provided to all the three channels and the current of individual cells are monitored continuously.
- Each channel is provided with protective fuse.
- Flexible cables with banana type pins are provided for all the cells for easier connections to the ACPT apparatus.
- DC voltage is controlled by continuously adjustable potentiometer
- Power input: 230 volt 50Hz AC
- Battery backup: 12v 75AH batteries x 6Nos connected in series.

Data Acquisition System (DAQ)

- Four-line LCD display is provided to indicate the current in milli ampere for three channels.
- 3 ½ digit LED display to indicate the DC voltage. 0-99.9 V range.
- DC voltage in 0-99.9volt, current in 999.9 milliampere
- LCD displays indicate all the parameters continuously. All the data are transmitted to the computer simultaneously.
- Record Interval time set: 0-999hr, 0-99min and 0-99 Sec. (Normally 30min is for RCPT test)
- Total log time set: 0-99hr, 0-99min and 0-99 Sec.
- The set values are settable through key pad switches provided.
- All the acquired data are transferred to the PC through RS232 output and through USB
- The monitor displays the present current reading as well as the cumulative current reading.

Software Layout



Instrument Test Setup

1) The equipment consists of a precision Voltage source which feed current (milli ampere range) to the Concrete moulds with rebar.
2) The moulds can be kept inside the Acrylic container with perforated Stainless steel cathode of suitable diameter.
3) NaCl solution is poured inside the container for penetration into the concrete mould. Stable DC voltage is applied between the SS cathode and the steel rod.
4) The data acquisition monitors the voltage and current of each concrete mould. The readings are acquired for an interval of say 30 min (can be settable by the user).
5) The period of test can be set up to a week. At the end of test the data can be transferred to a PC which will provide all the readings.

6) Graphical plot can be done current with respect to time.
7) The time at which sudden raise of current will be noted down for each cell
8) Logging period and the total test period can be set by the user using the key switches provided.
9) The data are stored in the equipment.
10) At the end of test a buzzer is activated. The data can be transferred to the PC.