

## Dynamic Battery Analyzer STC 612A



- Tests 6V and 12V Batteries
- Powered by battery under test
- Microprocessor controlled
- Automatic selection of battery voltage

### Description of device and operation

The **STC 612A Dynamic Battery Analyzer** is a microprocessor controlled, host powered instrument designed to test and evaluate the standby charged condition and dynamic capabilities under load of a 6 or 12 volt, sealed, lead-acid battery. It will also give an indication of the performance of the associated charging system.

A **static test** is initiated by connecting the test leads of the instrument to the battery to be analyzed. The **STC 612A** monitors battery and charging circuit voltage and indicates the results on an easy to read LED display.

#### Pre-load static test:

Charging system connected: *Charge voltage too high or open battery, charging normal, no charging voltage*

Battery only: *Charge too high or open cell, normal charge, insufficient voltage to test or shorted cell*

A microprocessor controlled **load test** sequence is then operator initiated with the battery disconnected from the charging circuit. The load current is based on the battery's rated AmpHour capacity. The battery condition is evaluated during the **load test** and latched at the termination.

#### Dynamic load test result:

Battery condition: *Good, marginal, bad*

### Specifications

#### ELECTRICAL

##### Input Voltage from battery:

5-16VDC

##### Load Current:

30 ma. during static test, 3.5 Amps max. during dynamic test.

##### Static indicator transition voltages:

6V	12V	INDICATION
<6.05	<12.10	too low to test
6.05-6.75	12.10-13.50	normal charged battery
6.75-7.10	13.50-14.20	normal charging voltage
>7.10	>14.20	overcharging/open battery

ALL TRANSITIONS HAVE 50 MILLIVOLT HYSTERESIS

##### Dynamic load current:

1.0 to 3.5 Amps, dependent on A.H. selected.

##### Dynamic load time interval:

120 to 270 seconds, depending on battery voltage and A.H. selection (all intervals +/-1%)

#### MECHANICAL

##### Size:

3.75" wide X 4.75" long X 2.25" high.

##### Weight :

16 oz., including test leads (Shipping weight: 2lb.).

##### Input Terminals:

Standard Banana Jacks, color coded.

##### Finish:

MIL-spec black epoxy paint.

##### Operating temperature:

0 to 140 degrees F. (-17 to 50 degreesC.).

Overtemperature shutdown at 140 degrees F.

##### Test leads:

48 inch, high voltage cable, colored coded. Stranded, tinned, copper conductor with soldered connections. Plated alligator clips with color coded vinyl insulating boots. Plated right angle banana plugs.

#### GENERAL

##### Warranty:

Two years parts and labor. (See separate warranty statement for complete details.)

### Ordering Information

**STC 612A** Dynamic Battery Analyzer, 6 and 12V., includes test lead set

**STC 3030** Carrying Case, hinged plastic

**STC A306** Replacement Test Lead Kit



**STONE TECHNOLOGIES CORPORATION**  
2311 Westrock Dr. #4  
Austin, Texas USA 78704  
www.stonetechnology.com  
800-440-1234