

# LCRN

## Constant Potential Charging System



### Applications

- Float charging of valve regulated batteries
- Product development of new battery systems
- Laboratory charging



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### Key Features

The LCRN can charge constant current with or without a voltage limit. If a voltage limit is set, then the unit will charge constant current until the voltage limit is reached. It will then change constant potential with the charge current tapering to maintain the preset voltage. Three silicon controlled rectifiers and five diodes in conjunction with an inductive capacitive filter provide the regulation of the unit.

#### Additional features include:

- Circuit isolation for separate cycling of battery cells or batteries within a pack
- Testing of single cells to zero volts
- Modules are installed on slide-out rails for cost effective circuit additions and upgrades to standard cabinets; modular construction allows efficient maintenance and service
- Temperature monitoring is standard on most models
- Up to 99 control program steps, with up to 10 limit conditions per step
- Network control for hundreds of circuits from a single host computer
- Graphical data presentation and analysis with VisualLCN™ software, or tabular data review in customer-designed Microsoft Access format
- Reliable design and sturdy construction

### General Specifications

<b>Voltage:</b>	0-18V
<b>Current:</b>	0-300A
<b>Circuits:</b>	up to 5
<b>Data Sampling Rate:</b>	1 sec
<b>Input Power Supply:</b>	3-phase, 50/60 Hz
<b>Accuracy:</b>	0.5% of FS*

\*Accuracy values are conservative assuming operation will be through the standard temperature range of 0-40° C and RH from 10-90% (non-condensing). Units calibrated and maintained in a temperature and humidity controlled environment can expect an accuracy of 0.02-0.05%FS.



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Charging System

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## System Options

- Temperature monitoring
- Temperature compensation
- Reference electrodes with input resistance up to 100 Mega-ohms
- Programmable digital inputs & outputs
- Customer specified alarms and faults
- Custom designed test leads, cell or battery handling fixtures



## General Configurations

The table below provides configurations for our most popular models. If your desired specifications are not listed, please contact us.

Model	Constant Current Amp Range	Charge Voltage	Constant Wattage
25LCRN-18	0-25	18.00	450
50LCRN-18	0-50	18.00	900
100LCRN-18	0-100	18.00	1800
150LCRN-18	0-150	18.00	2700

\*Specifications subject to change without notice.

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