

## Description

The Local Rectifier Unit (LRU) is a switch-mode power supply unit capable of providing the required protective current for impressed current cathodic protection systems. The LRUs are designed and manufactured with standard features tailored to cathodic protection industry needs. Custom designed features can be incorporated to fit any project requirements for either existing or new build structures.

## Features and Benefits

- MADE IN THE USA to meet any project requirement.
- Specifically designed and manufactured for the cathodic protection industry.
- Incoming AC: 1P or 3P, variable input voltage.
- DC Current outputs up to 12000mA per channel.
- DC Voltage outputs up to 28V per channel.
- Units available with single channel or multi-channel outputs.
- Each DC output individually controllable with current set in 1mA steps and voltage in 10mV steps with a ripple of less than 10mV at 100Hz.
- Utilization of any type of reference electrode with measuring accuracy of +/- 0.5mV.
- Synchronized acquisition of all RE instant-off simultaneously for the entire structure with a single interruption.
- Operation in Constant Current, Constant Voltage; with maximum limits.
- Operational alarms e.g. for high or low current output.
- Surge and lightning protection.
- Internal Impedance: >10M Ohms.
- Unlimited number of reference electrode inputs.
- Ambient operating parameters: 5 to +122° F at up to 95% humidity.
- Efficiency: >95% of regulated voltage.
- Local touchscreen control or via an LCD and keypad with a microprocessor capable of performing all output controls and readings locally independent of Main Control Units, as well as local backup of output settings and storage of logging data for 50 years.
- LEDs for input and output voltage presence.
- Available in a full range of enclosures sizes, suitable for all environments with IP/NEMA rating. Available in corrosion resistant materials e.g. GRP, coated mild and stainless steel.



## Networking, Monitoring and Remote Control

- Can operate as a standalone unit or with multiple units incorporated into a communications network with a single MCU.
- Full remote control and monitoring via physical communications network Ethernet, Modbus or GSM connection.
- Synchronized current interruption either locally via a timer over a communications network or via GPS for multiple TRs in remote locations.
- Can be incorporated into existing communications networks or used as a replacement for existing systems.
- Communication via EIA-485, Copper Ethernet 10/100base-TX or Optical Fiber Ethernet 100Base-Fx/100Base-Sx depending on distance from MCU.
- Available with ElectroTechCP™ proprietary remote software and fully SCADA compatible.

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