





#### NEAR ZERO WATER LOSS, NEAR ZERO GASSING HYGROSCOPIC CATALYST VENTS FOR FLOODED / VENTED BATTERIES



The Philadelphia Scientific CTL-200 recombiner, part of our MicroCAT line, is specifically designed for flooded/vented cells in stationary battery applications.

The CTL-200 efficiently recombines Hydrogen and Oxygen back into water before it leaves the cell. The result is that the battery becomes virtually maintenance free while hydrogen gas emissions are all but eliminated.

The CTL-200 features a low pressure, 2-way vent system, which seals the cell allowing gasses time to be recombined efficiently while providing overpressure and vacuum protection. This turns a standard flooded/ vented cell in to a (flooded/vented) valve regulated cell.





The principle of hygroscopic absorption is used which eliminates the need for large external condensing surfaces. This allows the CTL-200 to be efficient while maintaining a low profile.

Safety is important so the CTL-200 is designed to be intrinsically safe in events of unintended overcharge. A combination of a self-limiting catalytic core and ultra-high temperature materials ensures the catalyst remains safe in all conditions.

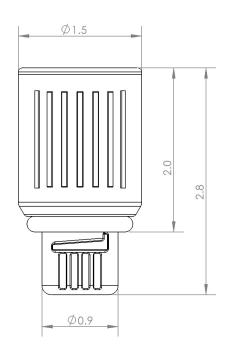
- Over 99% effective in recombining gases back into water vapor.
- Utilizes the hygroscopic environment of the cell, not condensation
- Capable of neutralizing hydrogen sulfide, stibine, arsine and amines.
- Self-limiting Catalytic Design to prevent damage to the unit or the cell.
- Significant reduction in dangerous gas release.
- Lower ventilation costs.
- Eliminates the risk of adding contaminated water to the cells.
- Testing has shown the capability to safely withstand extended periods of 50 amps of overcurrent gas generation without degradation.<sup>4</sup>





## **TECHNICAL SPECIFICATIONS - CTL-200**

Recombination Rating	65.2 +/- 5.0 cc/min H <sub>2</sub> & O <sub>2</sub>
Max Internal Temperature	93°C (200°F)
Max External Temperature	260°C (500°F)
Body Materials	Non Hygroscopic, High-Impact, High-Temperature Polymer
Typical Positive Polarization Shift	-30 mV
Typical Negative Polarization Shift	+30 mV
Dimensions Diameter Height Above Vent	38.1mm (1.5″) 50.8mm (2.0″)



\*1 Dependant on alloy, temperature and float voltage.

\*2 Based on observations over a 12 month period.

\*3 Due to watering requirements.
\*4 Degradation is defined as physical failure of the recombiner.



### FOR PRODUCT SPECIFICATIONS, USER GUIDES AND FURTHER INFORMATION PLEASE VISIT:

HTTPS://WWW.PHLSCI.COM/PRODUCT-LINES/MICROCAT-CATALYST/MICROCAT-CTL-200-US/

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