



- **Optimal Three State Charging**
- **State of Charge/Service LEDs**
- **Low Standby Battery Drain**
- **Customizable Charge Algorithm**
- **Optional Control/Status Signals**
- **Optional Temp Compensation**
- **Vibration Resistant**
- **Reverse Polarity Protected**
- **Over Temperature Protected**
- **Over Current/Voltage Protected**
- **Waterproof-Hermetically Sealed**
- **UL/CSA1236 Certified**
- **Full Two Year Warranty**

Description

The CT500-2 is a rugged, waterproof and sophisticated three state lead-acid battery charger. With a wide operating temperature range (-20C to 50C) and UL/CSA1236 certification, this product is especially suited for high end industrial applications. The CT500-2 is factory programmable to accommodate several charging algorithms and an LED display

to indicate status. The charger is controlled by an embedded microcontroller that contains software developed by and proprietary to ChargeTek. The CT500-2 precisely controls charging voltage and current to insure a complete recharge every time. The charger may be left connected indefinitely to the battery, maintaining full charge at all times.

Charging Specifications

PARAMETER	DESCRIPTION/CONDITIONS	MIN	NOM	MAX	UNITS
V_{FSTERM}	Fast charge termination voltage, 25C	28.8	29.2	29.6	VDC
V_{FL}	Float voltage, $I_{OUT} < 1.0 A$, 25 C	26.8	27.2	27.4	VDC
I_{FS}	Fast charge current, $V_{BATTERY} = 12V$	2.5		2.8	Amps
I_{ABTERM}	Absorption mode charge termination current, Transition from Fast to Absorption	1.4		1.6	Amps
I_{FLTERM}	Float charge termination current	0.7		1.3	Amps
I_{SBY}	Standby Current, AC Off			0.5	ma

Charging Algorithm: Supplies constant current to battery until V_{FSTERM} . Transition to Absorption Mode follows and regulates battery voltage at V_{FSTERM} until current decreases to I_{ABTERM} . Float Mode follows and regulates battery voltage at V_{FL} .



