

# C.P. Sentinel "Aqua-Line" Series Cathodic Protection Rectifier

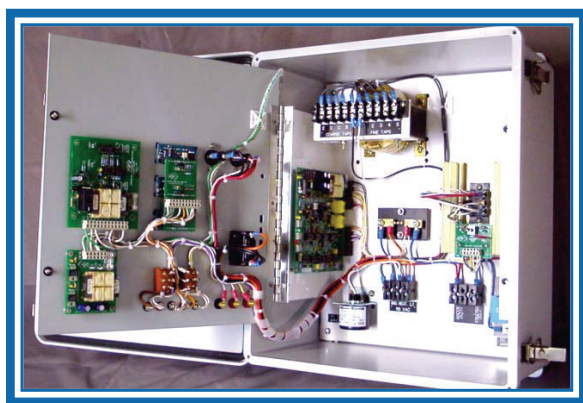


■ **INTEGRATED  
RECTIFIER TECHNOLOGIES INC.**

The **IRT C.P. Sentinel "Aqua-Line" Series** is designed and manufactured with high quality materials to deliver unmatched performance, reliability and longevity in protecting water and wastewater related assets. This series provides the precise control required to maintain the protection criteria as determined by the ANSI/AWWA standard D104.

## STANDARD FEATURES

- Standard DC output ratings: 20 Volt-5 Ampere, 30 Volt-8 Ampere and 30 Volt-16 Ampere (other ratings optional)
- Type 4X enclosure; with superior UV protected white fiberglass reinforced polyester (FRP) construction (other enclosure types optional); stainless steel hardware; single lockable door; wall or frame mounting (pole mounting optional)
- Removable chassis panel construction
- "Touch-Safe" hinged instrument panel (protects operator from electrical connections)
- Electrical hardware is brass or copper with electroless nickel plated finish
- Electrical connections are double-nutted
- 115 Volt single phase AC input (for other options, please consult with our Sales team)
- Magnetic trip AC input circuit breaker(s)
- Class H transformer with over capacity design
- Electronic "IR-Drop Free" Structure-to-Reference Electrode Potential control mode ("ON" Potential mode optional)
  - Electronic Voltage and Current control modes and limits; automatic transition between electronic control modes (no manual switching required)
  - Current/voltage control within  $\pm 3\%$  of set point / Potential control within  $\pm 5$  mV of set point
  - LED indicators for operational mode and power indication
  - Reference electrode input resistance  $> 20$  MOhms
  - Auxiliary "manual" transformer tap type output adjustment mode (25 steps) with "Automatic/Manual" operation selector switch
  - (3) terminals for connection of (2) Reference Electrodes and (1) Structure Sense Lead with Reference Electrode selector switch
- AC secondary and DC output fusing with spares
- SCR/diode rectification bridge with surge protection
- High intensity 3.5 digit LED meters ( $\pm 0.1\%$  accuracy) with "Off-On" switch
- High energy AC and DC lightning/surge protection
- Operating ambient:  $-40^{\circ}$  to  $+45^{\circ}\text{C}$  ( $-40^{\circ}$  to  $+113^{\circ}\text{F}$ )
- NRTL electrical approval (Intertek/ETL)
- Limited application specific optional features available



**Products to protect your assets and our environment!**

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# C.P. Sentinel "Aqua-Line" Series Model Coding and Enclosure Dimensions

## CAASAS 30-16A<sub>b</sub>P

C.P. SENTINEL AQUA-LINE

AIR-COOLED TYPE

SILICON RECTIFIER TYPE

AC INPUT

A - 115 VAC  
OPTIONAL INPUTS  
(CONSULT FACTORY)

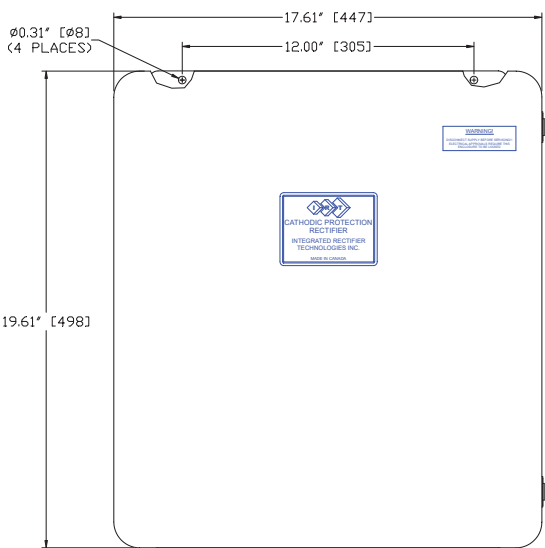
S - SINGLE PHASE

DC VOLTAGE RATING

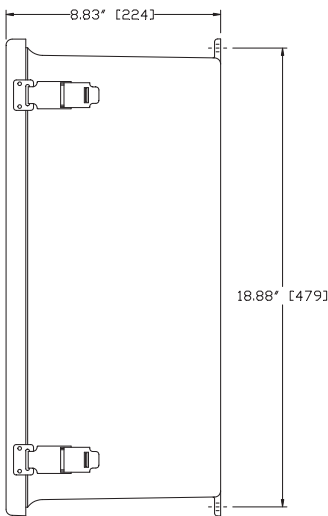
DC CURRENT RATING

### COMMON OPTIONAL FEATURES

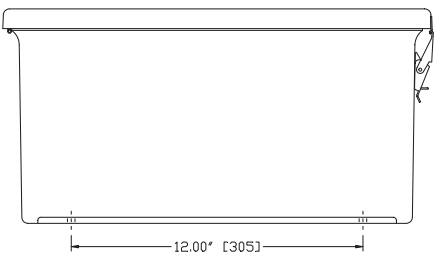
A<sub>b</sub> - POTENTIAL MONITOR ALARM CIRCUIT  
WITH DOOR MOUNTED LED ALARM LAMPS  
D - UPGRADED SCR - DIODE VOLTAGE (PIV) RATING  
P - AUXILIARY POSITIVE OUTPUT CIRCUIT  
c/w 5 OHM 100 WATT RHEOSTAT  
W - NON-STANDARD ENCLOSURE TYPE



FRONT VIEW



SIDE VIEW



BOTTOM VIEW

Standard C.P. Sentinel Aqua-Line Model Information

| MODEL        | AC Volts<br>(Nominal) | AC Amperes<br>(max) | DC Volts<br>(max) | DC Amperes<br>(max) | Packaged<br>Weight (lbs.) |
|--------------|-----------------------|---------------------|-------------------|---------------------|---------------------------|
| CAASAS 20-5  | 115                   | 1.71                | 20                | 5                   | 48                        |
| CAASAS 30-8  | 115                   | 3.79                | 30                | 8                   | 52                        |
| CAASAS 30-16 | 115                   | 7.58                | 30                | 16                  | 63                        |