

# CWC-A Control Module

the  
**POWER**  
you need



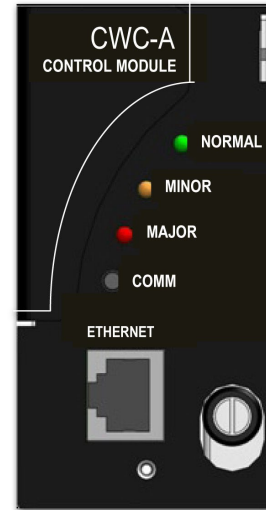
REV: 020816

## PRODUCT FEATURES:

- **Designed for Power Shelf Control, Alarms, & Monitoring:**
  - AC Input Voltage and Current
  - Multi-Output DC Voltages and Currents
  - Rectifier Module Status, Configurable Output & Alarms
  - Intelligent Battery Charging with Temp Compensation,
  - BatteryCell Monitors, Configurable LVD Controls
- Monitors Temps for Battery Shelf and Rack (Cabinet)
- Controls Multiple Dry Relays (See Dry Relay Example, Page 2)
- Communicates via RS232, Ethernet, and SNMP
- Meets Conducted EMI, Class A
- Designed to Meet cULus, CE, and NEBS

Contact DongAh for Communication Software or additional details.

CWC-A Control Module Front View



## INPUT SPECIFICATIONS:

VOLTAGE	85VAC to 264VAC
FREQUENCY	47~63 Hz
HARMONICS	EN61000-3-2 Class D compliant (0.97 PF)

## GENERAL SPECIFICATIONS:

OPERATING TEMPERATURE	-40°C to +70°C
STORAGE TEMPERATURE	-55°C to +85°C
OPERATING HUMIDITY	20% ~ 80% (non-condensing)
STORAGE HUMIDITY	5% ~ 95% (non-condensing)
COOLING	Free-Air Convection (No forced airflow required)
VIBRATION	10-55Hz, 2G, 3Min Period, 60 min each (3 axes)
SHOCK	20G Peak Acceleration
RELIABILITY	MTBF: 267,956 hours (50°C, per MIL STD 217F)
SIZE (LxWxH)	10.69" x 1.693" x 3.47"

## EMISSIONS:

EMISSIONS	EN55022 Level A (Conducted)
ESD	EN61000-4-2, 4KV Contact/ 8KV Air
RADIATED SUSCEPTIBILITY	EN61000-4-3, 26MHz-2000MHz, 10V/m, 80%AM
EFT/BURSTS	EN61000-4-4, 2KV
SURGES	EN61000-4-5, 2KV Earth, 1KV Line-Line
CONDUCTED IMMUNITY	EN61000-4-6, 150KHz-80MHz, 10Vrms, 80%AM
VOLTAGE DIPS	EN61000-4-10, 95% Dip, 10ms / 30% Dip, 500ms
VOLTAGE INTERRUPTIONS	EN61000-4-11, 95% reduction, 5ms
FLUCTUATIONS & FLICKER	EN61000-3-3

## SAFETY STANDARDS:

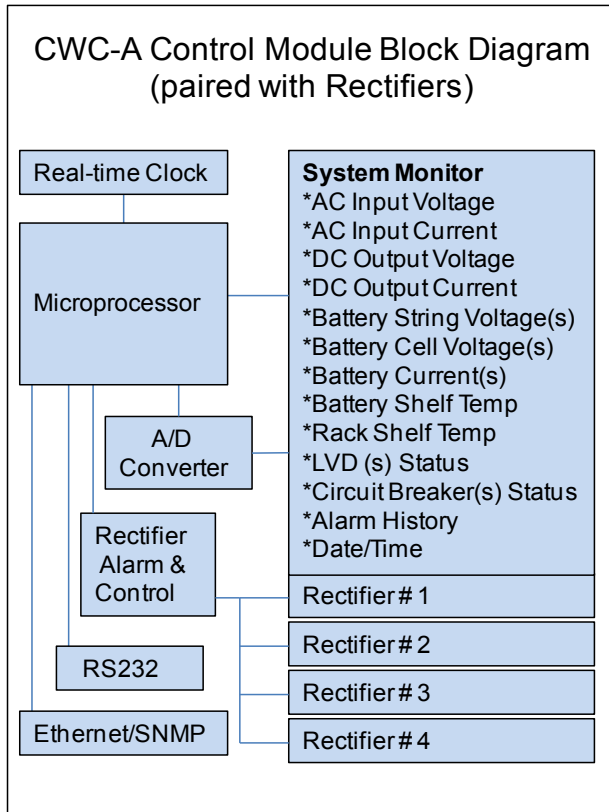
DESIGNED TO MEET	UL / cUL 60950-1, CE Mark, NEBS
DESIGNED TO MEET	Telcordia; GR-1089-CORE section 2
DESIGNED TO MEET	Telcordia; GR-1089-CORE section 4
DESIGNED TO MEET	Telcordia; GR-1089-CORE section 4.4

## CONFIGURABLE MONITORING & ALARMS:

Input Undervoltage/Overvoltage Alarms  
Battery Charging with Temperature Compensation  
Battery Temperature and Rack Temperature Monitoring  
Battery Low Voltage Disconnect (LVD) controls  
Front Panel Status LEDs (Normal, Minor & Major Alarms)  
RS232 Serial Communication (for Installation & Setup)  
Ethernet Communication for Shelf Monitoring  
SNMP Protocol for Remote Monitoring, Queries, & Traps

ITE / EMBEDDED POWER SUPPLY

## CWC-A CONTROL MODULE BLOCK DIAGRAM:



## DRY RELAY ALARM EXAMPLE:

No.	Alarm	Definition	Criteria
1	ACF	AC Fail- (Input)	AC#1 Input and/or AC#2 Input is < 80VAC or ≥ 280VAC
2	DCF	DC Fail- (High)	DC Output Bus is > 58V (default; configurable 56V~60V)
		DC Fail- (Low)	DC Output Bus is < 48V (default; configurable 40V~50V)
3	RML	Rectifier Module Loss	One or more DRM-440 Rectifier Modules has failed, or Shelf Configuration mis-match
4	BF	Battery Fail- (Low Voltage)	Battery Bank Voltage < 44Vdc (default; configurable 40V~50V)
		Battery Fail- (LVD)	LVD1 and/or LVD2 Low Voltage Disconnect is open: [Battery is discharged below 42Vdc (default; configurable 40V~50V), or BATT cables not connected, or BATT cables are reversed]
		Battery Fail- (Breaker Trip)	BATT#1 or BATT#2 Circuit Breaker is tripped
		Battery Fail- (TEMP/CELL cables)	BATT TEMP, RACK TEMP, or CELL cable(s) not installed or defective
		Battery Fail- (BATT TEMP)	BATT TEMP HIGH or BATT TEMP LOW (Ambient Temp) Alarm

