

Fixture Type:	
Model Number:	
Project:	

## CISM Series Single-Phase Fast-Transfer Inverter Systems

*Self-Testing/Self-Diagnostic Operation*

### ORDERING INFORMATION

Model Number	Battery	Voltage	Run Time	Options
CISM05 = 500 va/watts	LC	120	R90	See Below
CISM10 = 1000 va/watts		277		
CISM15 = 1500 va/watts				
CISM20 = 2000 va/watts				

### OPTIONS

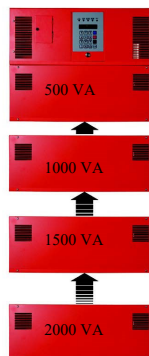
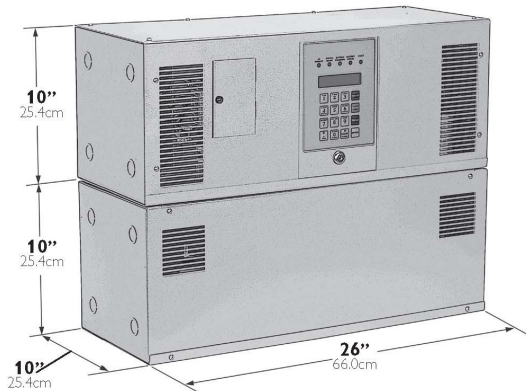
<b>N</b>	Normally-Off Output (Emergency Only Operation of Load)
<b>T</b>	Output Circuit Breaker Trip Alarm
<b>S</b>	Summary Form C Contacts (System Alarm Activated)
<b>IDB</b>	Internal Dimmer Bypass
<b>RS</b>	RS232 Communication Port
<b>MOD</b>	External Modem (Requires "RS", RS232 Communication Port Option above)
<b>RMP</b>	Remote Meter Panel
<b>RSAP</b>	Remote Summary Alarm Panel
<b>EMBS</b>	External Maintenance Bypass Switch
<b>Z</b>	Seismic bracing for batteries - Requires Wall Mounting Bracket
<b>EW</b>	Extended Warranty (Includes Factory Start-Up Service)
<b>FS</b>	Factory Start-Up (Includes One Additional Year Of Warranty)

### OUTPUT CIRCUIT BREAKERS

B	A	20	02
B = Norm On N = Norm Off	A = 120 V D = 277V	10,15, or 20 Circuit Breaker Rating	01 thru 04 # of Circuits

### ACCESSORIES

<b>W</b>	Wall Mounting Bracket
<b>BM</b>	Add-On Battery Module (500Va/Watt Capacity)



The CISM system design is completely modular. The system's capacity can be increased at any time by simply adding accessory battery modules. Each additional battery module will increase the total system capacity by 500 VA/ Watts. Increased capacity can be used to power additional loads or increase the emergency cycle duration time of existing connected loads (additional run time will vary depending on system capacity and type of load). A maximum of four battery modules (2000VA/Watts) can be controlled by the CISM electronics cabinet.



### PRODUCT FEATURES

- Pulse Width Modulated/MOSFET technology
- Low Total Harmonic Distortion (THD)
- "Off-Line" design provides 98% efficiency
- Compatible with HID, fluorescent, incandescent and low voltage lighting
- Microprocessor controlled 40-character display with touch pad controls
- User-programmable functions and password protection
- Self-testing/self-diagnostic operation
- Alarm, Event and Test logs stored in memory
- Models from 500VA to 2kVA
- Completely modular design-mount cabinets stacked, side-by-side or apart
- Field upgradeable in 500VA increments
- Floor standing or wall mountable
- Maintenance-free lead calcium battery
- Input and output circuit breaker protection
- Built-in circuit breaker access panel
- DC switch
- 68°F to 86°F (20°C to 30°C) operating range
- Meets NFPA Life safety Code101, OSHA and NEC
- New York City approved
- UL924 listed



# CISM Series Single-Phase Fast Transfer Inverter System

## SPECIFICATIONS

### **Input**

- Input power walk-in: 2 cycles, limiting inrush current to less than 125%
- Input frequency: 60 Hz +/- 3% optional 50 Hz available upon request.
- Synchronizing slew rate: 1Hz per second nominal
- Input protection: Input circuit breaker
- Harmonic distortion: <10% Power factor: 0.9 or better

### **Charger and Electronics**

- Charger Type: Microprocessor controlled, temperature compensating.
- Utility Input: 120 or 277VAC, 60 Hz. Other voltages available, consult factory.
- Temperature Range: Optimum performance between 68°F and 86°F (20°C and 30°C)
- Storage Temperature: -4°F to 158°F (-20°C to 70°C)
- Altitude: <10,000 feet without de-rating
- Relative Humidity: <95% (non condensing)
- Run time: 90 minutes standard (UL-924). Contact factory for other run time information.
- Recharge Duty Cycle: Per UL 924 Controls: Microprocessor controlled
- 2 x 20 character display with touch pad interface
- 5 LED Indicators with Ringback Alarms: AC Present, System Ready, Battery Charging, Battery Power and Fault Condition
- Safety Features: Input and Output Circuit Breakers, Battery Switch, Disconnect Fuse, Low Voltage Battery Disconnect, DC Overload and Short Circuit Protection

### **Output**

- Dynamic voltage: +/- 3% for +/- 25% load step change, +/- 6% for 50% load step change, recovery within 3 cycles
- Harmonic distortion: <3% THD for linear load
- Overload: Fuse protected
- Output frequency: 60Hz +/- .05 Hz during emergency mode
- Load power factor: 0.5 lag to .5 lead
- Inverter overload: 110% for 5 minutes
- Output protection: Distribution circuit breaker(s)
- Static voltage: Load current change +/- 4%, battery discharge +/- 4%

## CONTROL PANEL



### **Program Functions:**

Set date,  
Set time,  
Set month test/set month time,  
Set annual test date/test time,  
Set load fault reduction setting  
Set load fault reduction setting  
Set low battery alarm  
Set near low battery alarm  
Set low AC voltage alarm  
Set high AC alarm  
Set ambient temperature alarm

### **Meter Functions:**

AC voltage input  
AC voltage output  
AC current output  
Battery voltage  
Battery current  
VA output  
Inverter watts  
Inverter minutes (cumulative)  
Ambient temperature  
System days (cumulative)  
Date and time

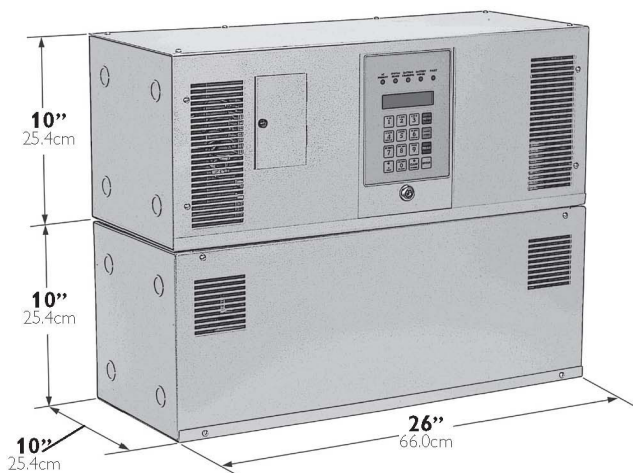
### **Test, Event and Alarm Logs:**

*Test and Event Logs (75 logs stored in memory)*  
*Recorded Data: Date, time, duration, output voltage, output current, ambient temperature, alarms present.*  
*Alarm Log (50 logs stored in memory) Recorded Data: Date, time, alarm type*

### **Alarm Functions:**

Output	Near Low Battery
Inverter	Low Battery
Charger	Load Reduction
Low Voltage	Overload
High Voltage	Overload Shut-down
High Temperature	

## DIMENSIONS



### **Construction:**

Cabinets: Electronics and battery cabinets are constructed of 16 gauge, heavy duty steel finished in red baked-on polyester powder paint providing scratch and corrosion resistance. Electronic and battery cabinet design is modular. Cabinets may be stacked, mounted side by side or installed separately.

### **Installation:**

Wiring: Wiring is provided for by conduit knockouts in the system cabinetry. All inter-cabinet and battery connection cables and jumpers are supplied with each CISM system.  
Wall Mounting: A wall mounting bracket kit (WMB) is available for wall mounting of electronics and battery cabinets  
Floor Standing: CISM cabinets allow stacked connection for floor standing installation.