



C&S Companies
 499 Col Eileen Collins Blvd.
 Syracuse, New York 13212-3930
 Phone: (315) 455-2000
 Fax: (315) 455-9667

Submittal #263323-1.0 263323 - Central Battery Equipment

Project: 128.060.001 - Dutchess Stadium New Clubhouse &
 Improvements
 1500 NY-9D
 Wappingers Falls, New York 12590

Central Battery Equipment - Product Information

SPEC SECTION:	263323 - Central Battery Equipment	SUBMITTAL MANAGER:	Kara Mearon (C&S Engineers Inc.)
STATUS:	Submitted	DATE CREATED:	03/13/2023
ISSUE DATE:		REVISION:	0
RESPONSIBLE CONTRACTOR:	Piazza Brothers Construction	RECEIVED FROM:	Julianna LoPriore
RECEIVED DATE:	05/30/2023	SUBMIT BY:	
FINAL DUE DATE:	06/13/2023	LOCATION:	
TYPE:	Product Information	COST CODE:	
APPROVERS:	Allen Schmidt (DLR Group), Sarah Treas (DLR Group), Kathy Walbert (DLR Group)		
BALL IN COURT:	Allen Schmidt (DLR Group), Sarah Treas (DLR Group), Kathy Walbert (DLR Group)		
DISTRIBUTION:			
DESCRIPTION:			
ATTACHMENTS:			

SUBMITTAL WORKFLOW

#	NAME	SUBMITTER/ APPROVER	SENT DATE	DUE DATE	RETURNED DATE	RESPONSE	ATTACHMENTS	COMMENTS
1	Damon Baxter	Submitter		1/8/2024		Pending		
2	Gus Carvajal	Submitter		1/8/2024		Pending		
3	Julianna LoPriore	Submitter		1/8/2024	5/30/2023	Submitted	263323-UPSInverter-CentralBatteryEquipment.pdf	
4	Allen Schmidt	Approver	5/30/2023	6/13/2023		Pending		
5	Sarah Treas	Approver	5/30/2023	6/13/2023		Pending		
6	Kathy Walbert	Approver		6/13/2023		Pending		



Submittal #263323-1.0 263323 - Central Battery Equipment

Architect/Engineer Approval:

- (A) Approved
- (A/N) Approved As Noted
- (RR) Revise and Resubmit
- (REJ) Rejected
- (SUB) Submit Specified Item

Checking is only for general compliance with the design concept of the project and general compliance with the information given in the contract documents. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for dimensions which shall be confirmed and correlated at the jobsite; fabrication processes and techniques of construction; coordination of his work with that of all other trades; and the satisfactory performance of his work.

Reviewed by: _____
Date: _____

DLRGROUP

Submittal Review

Project Name:	Dutchess Stadium Left Field Building
Project Number:	57-21113-01
Submittal ID:	263323-1.0
Received On:	5/31/2023
Reviewed On:	6/18/2023
Reviewed By:	Collin Wheeler

Action: Reviewed

This review is for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. Review of submittals is not for the purpose of determining the accuracy and completeness of other information such as dimensions, quantities, and installation or performance of equipment or systems, which are the Contractor's responsibility. The Architect's review shall not constitute approval of safety precautions or construction means, methods, techniques, sequences or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component. The Architect's comments, notes or corrections are not an authorization to proceed with Work involving a change in the Contract Sum, the Contract Time or both. If any portion of this review requires a change to the Work, an appropriate change instrument must be executed in accordance with the Contract Documents.

BY _____ DATE _____ COPIES TO _____



SUBMITTAL COVER SHEET

From: Julianna LoPriore **Attn:** Tim Brown
Company: Piazza, Inc. **C&S Companies**
Phone/Fax #: (914)741-4435 **499 Col. Eileen Collins Blvd.**
Project: Dutchess Stadium **Syracuse, NY 13212**
Project #: RFB-DCB-18-22 **(315) 455-2000; Fax: 455-9577**

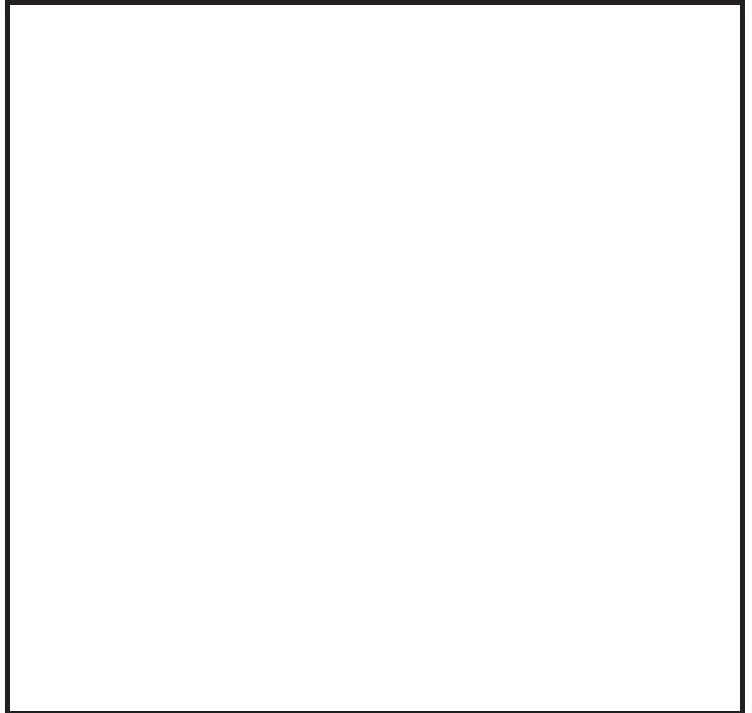
Reference: CSI Code: 263323 Dwg No: _____
 Paragraph: _____ Other: _____

Description: UPS Inverter Central Battery Equipment

Supplier: Upstate Electric
Manufacturer: Emergi-Lite

Item Type: Product Data Manf. Cert/Warranty
 Shop Drawings Samples
 Other: _____

Contractor's Approval:
 _____ Reviewed for general compliance of specifications.
 _____ This submittal is a **substitute** to the specified product.
 _____ For Architects / Engineers Approval
 This is our 1st submittal for this item.
 We are submitting 1 copies.
Contractor Submittal Review Stamp
 THE ATTACHED MATERIAL HAS BEEN REVIEWED BY THE UNDERSIGNED AND IS BELIEVED TO COMPLY WITH ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE UNDERSIGNED UNDERSTANDS VERIFICATION OF FIELD DIMENSIONS, AND COORDINATION WITH OTHER TRADES, REMAINS THE RESPONSIBILITY OF THE CONTRACTOR.
 Submitted by: Piazza, Inc.
 Date: _____



*Note: Provide one cover sheet for each copy of the submittal.

SUBMITTAL COVER SHEET

Contractor: Piazza Inc

Address: 3 W. Stevens Ave - Hawthorne NY 10532 Telephone: (914)741 4435

TYPE OF SUBMITTAL:

Owner: Dutchess County of Public Works
Name of Project: Rebid Dutchess Stadium New Left Field Clubhouse, Seating Bowl, & Restroom Building

- | | | |
|--|--------------------------------------|--|
| <input type="checkbox"/> Shop Drawings | <input type="checkbox"/> Schedule | <input type="checkbox"/> Physical Sample |
| <input checked="" type="checkbox"/> Technical Data | <input type="checkbox"/> Certificate | <input type="checkbox"/> Color Sample |
| <input type="checkbox"/> Test Report | <input type="checkbox"/> Warranty | <input type="checkbox"/> _____ |

Submission #: (1st), 2nd, 3rd, 4th (circle one)

Description:
Product Identification: <u>UPS Inverter</u>
Manufacturer: <u>Emergi-Lite</u>
Subcontractor/Supplier: _____
DOCUMENT REFERENCES: (Must be fully filled out)
Spec Section No.: <u>263323</u> Drawing No(s): _____
Paragraph: _____ Rm. Or Det. No(s): _____

Contractor Remarks:

These documents have been checked for accuracy and coordination with job conditions and contract requirements by Piazza, Inc. and have been found to comply with the provisions of the contract documents. - PIAZZA INC.

Contractor Submittal Review Stamp

THE ATTACHED MATERIAL HAS BEEN REVIEWED BY THE UNDERSIGNED AND IS BELIEVED TO COMPLY WITH ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE UNDERSIGNED UNDERSTANDS VERIFICATION OF FIELD DIMENSIONS, AND COORDINATION WITH OTHER TRADES, REMAINS THE RESPONSIBILITY OF THE CONTRACTOR.

DATE: _____ BY (SIGN): Piazza Inc

Consultant use below this line:

Architect Submittal Review Stamp

- | | |
|--|---|
| <input type="checkbox"/> NO EXCEPTIONS | <input type="checkbox"/> MAKE CORRECTIONS NOTED |
| <input type="checkbox"/> REJECTED | <input type="checkbox"/> REVISE AND RESUBMIT |
| <input type="checkbox"/> EXAMINED | <input type="checkbox"/> SUBMIT SPECIFIED ITEM |

CHECKING IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE PLANS & SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS WHICH SHALL BE CONFIRMED & CORRELATED AT THE JOB SITE; FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATION OF HIS WORK WITH THAT OF ALL OTHER TRADES & THE SATISFACTORY PERFORMANCE OF HIS WORK.
BBS Architects Landscape Architects Engineers

DATE _____ BY _____



Job Name:
DUTCHESS STADIUM
Distributor: LS FIELDTECH, LLC.
(ROCHESTER)

Catalog Number:
6-FTE-7-SG-D2006-2YW-SPAREF

Type:
INV

Notes: INCLUDES FREIGHT & STARTUP W/ SAME DAY TRAINING - FACTORY SUBMITTAL REQUIRED

MID23-74318

EMERGI-LITE CENTRAL & INVERTER SYSTEMS

Emerg-Power Systems FTE Single Phase Series

Uninterruptible emergency lighting inverter system for for all lighting and motor loads
1.5KVA –16.7KVA



Features

- 98% efficient at full load
- 2ms transfer time
- PWM/IGBT technology
- Self-testing/Self-diagnostic
- User programmable with password protection
- Standard input circuit breaker
- RS232 communication port
- Micro-processor controlled
- Automatic event and alarm log

- 90 min. standard run time
- Generator compatibility
- Custom and mixed voltages available
- Automatic event, test and alarm log
- Space saving single cabinet design
- Maintenance free standard batteries
- Forced air cooling during emergency mode only

UL listed to UL 924.
Meets NFPA101, NFPA70, OSHA.



Electrical/mechanical characteristics (data provided for standard lead calcium batteries)

Power rating KVA= W	Effic. at full load %	Max. input current (A)		Heat loss in normal mode (BTU/HR)	Batt. VDC	Batt. A	No. of Batt.	UPS cabinet dimensions			UPS cab. weight lbs	Batt. weight lbs	Total system weight lbs
		120V	277V					W"	H"	D"			
1.5	98	16	7	102	48	39	4	30	47	25	215 lbs	296 lbs	511 lbs
2.25	98	24	11	153	72	38	6	30	47	25	230 lbs	444 lbs	674 lbs
3	98	32	14	204	96	38	8	30	47	25	235 lbs	592 lbs	827 lbs
3.75	98	39	17	255	120	37	10	30	47	25	240 lbs	740 lbs	980 lbs
5	98	50	22	340	144	40	12	30	47	25	280 lbs	888 lbs	1168 lbs
6	98	63	27	408	180	40	15	48	76	25	605 lbs	1110 lbs	1715 lbs
8	98	84	36	544	240	39	20	48	76	25	640 lbs	1480 lbs	2120 lbs
10	98	105	45	680	144	82	24	48	76	25	785 lbs	1776 lbs	2561 lbs
12.5	98	131	57	860	180	82	30	48	76	25	805 lbs	2220 lbs	3025 lbs
16.7	98	174	76	1135	240	80	40	48	76	25	885 lbs	2960 lbs	3845 lbs

How to order

Input/output voltage	Series	Nominal capacity	Battery type	Emergency run time ²	Output breaker configuration	Output breaker voltage	Output breaker amperage	Output breaker qty.
1= 120-120	FTE	1= 1500VA	SG= Standard	Blank= 90 min.	Blank= Normally ON	A= 120	10= 10 Amp	01-24=
2= 120-120/277		2= 2250VA	G= VRLA	120= 120 min.³	N= Normally OFF⁴	B= 208	16= 16 Amp	Choose the number of output breakers between 01 and 24 ⁵
3= 208-120 ¹		3= 3000VA	20 yr.	² Running at a reduced load will increase emergency run time. Contact factory for other run times.		C= 240	20= 20 Amp	06
4= 240-120/240		4= 3750VA				D= 277	25= 25 Amp	
5= 277-120		5= 5000VA					32= 32 Amp	
6= 277-277		6= 6000VA					40= 40 Amp	
7= 277-277/120		7= 8000VA					50= 50 Amp	
8= 208-120/240 ¹		8= 10.0KVA			⁴ Normally off loads cannot exceed 20% of total KVA rating with any combination of HID loads		63= 63 Amp	
9= 347-347		9= 12.5KVA						
A= 208-120/208 ¹		10= 16.7KVA						

Options

- A=** Remote summary alarm panel
- BL=** Circuit breaker locks
- BTM=** Battery temperature monitor
- C=** Status monitoring contacts
- DT=** Drip top (NEMA 2)
- F=** Fast charge
- H=** OSHPD "withstand" seismic (Not available with "VRLA 20 yr." battery)
- I=** Inverter on dry form C contact
- L=** Load control relay (line voltage dimmer or switch bypass)
- M=** Maintenance bypass (MBB)
- M(BBM)=** Internal maintenance bypass
- O=** Output transfer delay (factory set at 3 seconds adjustable 0 to 7.5 seconds)

- P=** Remote status panel (status alarms, requires C option)
- R=** Remote meter panel
- S=** Summary fault form C contacts
- SEA=** Serial to ethernet adapter (supervised) alarm⁵
- T=** Output trip
- V=** Time delay 15 minutes (15 minute retransfer time delay of normally off circuit after return of utility)
- Z=** Seismic mounting (Anchorage based on calculations. For systems requiring OSHPD/Withstand testing, please contact the factory)
- ZM=** Zone monitoring (quantity must be specified)

Monitoring

- BAC=** BACnet communication (MSTP)
- BIP=** BACnet IP
- MIP=** Modbus TCP/IP
- MOD=** Modbus RTU

Warranty (one year standard)

- 2YW=** Start up & same day training
- 2YWT=** Start up, same day training and full run test
- 5YP=** 5-year preventative maintenance plan (startup included)
- 5YW=** 5-year extended electronics warranty
- TR=** Training if required on day other than startup

Accessories

- Blank=** No accessories
- EMBP=** External maintenance bypass switch⁶
- SPARES=** Spare fuses & circuit boards
- SPAREF=** Spare fuse kit

Example: 1FTE4SG1201010CBAC2YW

⁵Maximum output breakers available: 12 unsupervised (1-pole), 8 supervised (1-pole) for 1.5KVA-5KVA; 24 unsupervised (1-pole), 18 supervised (1-pole) for 6KVA-16.7KVA; Breakers provided are 20 Amps unless specified otherwise. A 2-pole breaker occupies 2 positions. Additional output breakers available on 1.5KVA units with optional top mount enclosure. Contact factory for details



Job Name:
DUTCHESS STADIUM
Distributor: LS FIELDTECH, LLC.
(ROCHESTER)

Catalog Number:
6-FTE-7-SG-D2006-2YW-SPAREF

Notes: INCLUDES FREIGHT & STARTUP W/ SAME
DAY TRAINING - FACTORY SUBMITTAL REQUIRED

Type:

INV

MID23-74318

EMERG-POWER SYSTEMS FTE SINGLE PHASE SERIES

Specifications

General

Design

- Stand-by. PWM inverter type utilizing IGBT technology with 2ms transfer time

Control

- Microprocessor controlled, 4 x 20-character display with touch pad controls & functions
- Continuous scrolling display of system status and faults, with alarm feature

Metering

- Input and output voltage, battery voltage, battery and output current, output VA, temperature, inverter wattage

Communications RS-232 port (DB9)

Electrical input

Voltage

- 120 or 277VAC 1-phase 2-wire +10% - 20%.
Contact factory for all other voltages

Input power walk-in

- Limiting inrush current to less than 125%, 10 times for 1 line cycle

Input frequency 60Hz, +/-3%

Protection Input circuit breaker

Harmonic distortion <10%

Power Factor 0.5 lag/lead

Electrical output

Voltage 120 or 277VAC, 1-phase 2-wire

Contact factory for all other voltage

Static voltage

- Load current change +/-2%, battery discharge +/-12.5%

Dynamic voltage

- +/-3% @ 25% load step change and +/-6% @50% load step change
- +/-3% for a 50% load step change, recovery within 3 cycles

Harmonic distortion <3% THD for linear load

Output frequency 60Hz +/- 0.05Hz during emergency mode

Load power factor 0.5 lag to 0.5 lead

Inverter overload 115% for 10 minutes, 150% for 16 cycles

Protection Optional distribution circuit breaker

Crest factor 2.8

Environmental conditions

Storage/transport

- -4°F to 158°F (-20°C to 70°C) without batteries
- 0°F to 104°F (-18°C to 40°C) with batteries
(max. 3 months at 104° F (40° C))

Operating temperature

UL924 listed to provide 90 mins of battery back up between 68° F and 86° F (20°C to 30°C). Battery performance can be affected by temperature

Altitude <10,000 feet (above sea level) without de-rating

Relative humidity 0 to 95% non-condensing

Audible noise Audible noise 50 dBA @ 1m from surface
in emergency mode

Cabinets

Single freestanding NEMA Type 1 steel cabinets powder coated for corrosion and scratch resistance. Front access design through hinged lockable doors requires only 39" front clearance and 12" top clearance. Top, left or right side conduit entry with knockouts.

Inverter

Using IGBT/PWM technology the inverter converts the DC voltage supplied by the batteries to AC voltage of a precise stabilized amplitude and frequency, suitable for most sophisticated electrical equipment. True sinusoidal output waveform with very low distortion (less than 3% for linear loads). Overload capability of up to 150% for 16 line cycles.

Charger

Fully automatic, temperature compensated, microprocessor controlled charger recharges fully discharged batteries in maximum 24 hours at nominal AC input voltage. AC input current limiting and DC over-voltage protection included.

Battery

System is provided standard with 10 year, maintenance free, sealed valve regulated, front terminals lead calcium batteries. 20 year sealed lead calcium battery also available. 90 min. standard discharge time at full load under normal operating temperature. Low voltage disconnect protection included. No special ventilation required.

Self-diagnostics

Automatic self tests consist of a 5-minute monthly and 90-minute annual function. The front-mounted control panel includes a 4-line 20-character display, and a keypad to control and monitor the internal operation of the system. This control panel allows the operator to easily "watch" system functions as they occur and check on virtually any aspect of the system's operation. Standard RS232 diagnostic interface.

Alarms

High/low battery charger voltage, high/low AC input voltage, near low battery, low battery, load reduction fault, output overload, high ambient temperature, inverter fault, output fault, optional output circuit breaker trip, charger fault, output overload shutdown and system test failure.

Optional features

Output circuit breakers, output trip alarms, 20 years sealed batteries, 12 hours fast recharge, internal/external maintenance bypass switch, remote meter panel, remote summary alarm panel, summary alarm dry form C contact, inverter on dry contacts, normally off output, bypass relays, seismic mounting, circuit breaker locks, battery temperature monitor, drip top, output transfer delay, time delay, zone monitoring, serial to ethernet, BACnet MS/TP, BACnet IP, MODBUS serial, MODBUS TCP/IP, serial to ethernet adapter.

Factory start-up

Includes one additional year of warranty. See warranty conditions

Warranty (full limited warranty conditions available upon request)

Limited manufacturer warranty is one-year, parts and labor, for system electronics or two-year with factory start-up program. Battery warranty is one year full plus 9 years pro-rata for a total of 10 years, under normal operating conditions. System must be put in service within 6 months from ship date in order to validate warranty.

2-Consult factory for other type batteries than the standard one.

Single line diagram - Normally on output circuit

