

1.2 KVA to 28.8 KVA Inverter System 827E



Utilizing 2 New Patents!

- The inverter modules employ a wireless, forced load share that eliminates a possible single point of failure
- Inverter modules also offer an active input noise suppression circuit that reduces peak current demands on the battery plant



827E System Shown

- 7.2 KVA per shelf, up to 28.8KVA
- 10 Amp, 1.2 KVA modular inverters
- Microprocessor synthesized true sine wave
- Modem offers dial up access when used with PECO II's Envision™ Monitoring Software
- NEBS Level 3

New Options:

30KVA Maintenance Bypass Panel and 200 Amp AC Distribution Panel

Product Description

A redundant source of AC power for communications applications is achievable with the 827E redundant and expandable digital inverter system. This modular DC to AC inverter system derives its source of input power from a -48VDC power system and provides highly reliable AC power, which is robust enough to handle a wide range of nonlinear loads with low power factors or high crest factors such as personal computers, servers and modems.

Redundant 1.2 KVA inverter modules operating in parallel, with independent DC inputs per module, eliminate the need for a static transfer switch or a second source of power. Isolation provided by the 827E inverter system supports both communications and commercial power grounding requirements.

The 827E system grows in increments of 1.2 KVA to provide capacities up to 28.8 KVA when four shelves are operating in parallel. Incremental growth, by adding shelves and/or "hot insertable" inverter modules when needed, will help defer initial equipment costs without sacrificing system reliability.

A modem is optional with the 827E, offering a dial up connection for the use with PECO II's Envision™ monitoring software. Via a remote PC, the user can view system status and also change setpoints. The software may also be used to monitor the plant locally via the standard serial interface located on the front of the system controller.



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Specifications

Input

Voltage Range	42-60VDC
Current	35 Amps maximum per inverter module

Output

Voltage	120VAC
Current	10 Amps per inverter module
Power	1.2 KVA per inverter module
Frequency	60Hz

Environmental

Storage Ambient	-40°F to +85°F (-40°C to +85°C)
Operating Ambient	-40°F to + 149°F (-40 to +65°C)
Humidity	< 95% non-condensing (maximum)
Heat Dissipation	778 BTU/hour per inverter module operating at full load

Mechanical

Height	8.72" for each shelf equipped
Width	19" or 23" rack mount
Depth	15.03"
Weight	32 lbs per shelf (unequipped) / 7 lbs per inverter module
Mounting	Relay rack or cabinet
Cooling	Front-to-rear (forced air)

Documentation

Product Manual	4380419PD
J Drawing	J-438827E

Status Indicators

	LED Description	Color	Contact Closure
Inverter Module	Power on	Green	
	Standby	Amber	
	Fail	Red	
Distribution Monitor	Plant OK	Green	
System Controller Module	Controller OK	Green	
	Plant minor alarm	Amber	Yes
	Plant major alarm	Red	Yes
	Capacity Alarm (no LED)	N/A	Yes

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Equipment Listing

List #	Description
L3	7.2KVA, 120VAC inverter shelf, -48VDC input, 23" mounting, 8.75" (5U) high, equipped with controller, distribution disconnect module, and slots for six L11 inverter modules.
L4	4.8KVA, 120VAC inverter shelf, -48VDC input, 19" mounting, 8.75" (5U) high, equipped with controller, distribution disconnect module, and slots for four L11 inverter modules.
L11	1.2 KVA Inverter module, 120VAC @ 10 Amps
L15	Blank panel for open inverter module position. Required for every L11 inverter module not equipped.
L20	Envision software kit. Does not include modem
L22	Modem kit
L25- L32	Alarm cable, 25-pin male, 6', 9', 12', 15', 20', 60', 100', 150' respectively
L51	Maintenance bypass panel, 10KVA for use with a single shelf configuration, 23" mounting, 7" (4U) high
L52	Maintenance bypass panel, 30KVA for use with a multi shelf configuration, 23" mounting, 7" (4U) high
L53	Alarm cable for connection between 1 st inverter shelf and the L52 bypass panel
L54	Alarm cable for connection between 2 nd inverter shelf and the L52 bypass panel
L55	Alarm cable for connection between 3 rd inverter shelf and the L52 bypass panel
L56	Alarm cable for connection between 4 th inverter shelf and the L52 bypass panel
L70	AC distribution panel, 120VAC, twelve 10A to 70A circuit breaker positions, 200 Amps, 23" mounting, 7" (4U) high

Consult PECO II for available equipment racks, enclosures, AC circuit breakers, and other material to accompany the 827E inverter system