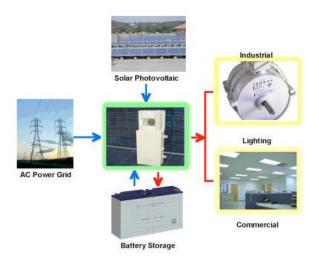


NEXTEK Power Systems, Inc.

Intelligent Energy Generation System



Nextek combines locally generated energy with the grid to power on-site DC loads for the highest possible reliability and efficiency.

NEXTEK's power system reduces energy costs by using energy from the lowest cost sources first.

The system uses all available energy from locally generated sources (such as photovoltaic cells) first, then 'fills in' with power from the grid or, when the grid is not available, from batteries.

Power generated as DC (direct current) is used as DC to support fixed DC loads in the building such as DC fluorescent lighting, motor controls, and more. Because the system never changes the power to AC, it avoids inverter losses, grid interconnection issues, and often requires no utility permitting.

Low voltage control features allow lighting to be more easily connected to occupancy sensors, low-voltage switches, and local or remote energy management systems. The low-voltage control wiring makes it safer and less expensive than traditional switching and control systems.

Locations that are ideally suited to the Nextek Power System include:

- One, two, and three story buildings with large, flat roofs.
- Locations operating fluorescent lights that are always on during the daytime like retail, grocery, and offices.
- Businesses that benefit from having the lights stay on during a power failure.
- Buildings with motors that utilize variable frequency motor drives such as the AB Powerflex series.
- Areas where utility rates or demand charges are high or where netmetering is not encouraged.

The Nextek Power System Directly
Couples® Nextek high-efficiency DC
ballasts and other DC devices to DC power
sources. The NPS-1000 takes DC power from
solar panels or other DC power sources,
adds any necessary AC power from the grid,
and powers selected loads with highly
efficient DC power.

The most efficient way to manage locally generated energy is to consume everything you generate; where, when, and how you generate it.



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Primary Input Voltage from local generation: 55 - 65 VDC	
Secondary Input Voltage from utility: 208-277V 50-60Hz AC	Maximum input current: 5.5 Amps AC
Input Voltage from backup battery: 54.0 VDC (48VDC Nominal)	Output Voltage: Nominal 48 VDC
Maximum output current: 18.5 Amps DC	Max Output: 1000W current limited, short protected
Typical Run Time on Batteries: 1 to 4 Hours	Optional Storage Batteries: Lead Acid, Deep Cycle
Switching: Low voltage manual switches or occupancy sensors.	Lighting type: T-8 or T-5 fluorescent, 4 foot lamps
Efficiency: DC/DC:97% -AC/DC:92.5%+ballast efficiency gain 4%	THD: <5% - Power Factor: 0.99
Dimensions: 8"W x 3.75"D x 21.5"H – 15 lbs.	CEC Rating: 93.5% plus Ballast Efficiency Gain (4%)
Safety Standards: UL-1012, Plenum Rated	Isolation Transformer Needed: None
Specifications subject to change without notice	

- All loads driven by this system are DC. Grid power is converted to DC as needed.
- Light fixtures are equipped with high efficiency DC ballasts.
- AC from the grid is converted to DC to power the lights.
- If solar panels are used, any available DC solar power is used instead of grid power.
- Batteries can be added to the system to supply backup power.
- Low voltage switches and occupancy sensors can be used to significantly reduce wiring costs and add control flexibility.



