

PV AC MODULE

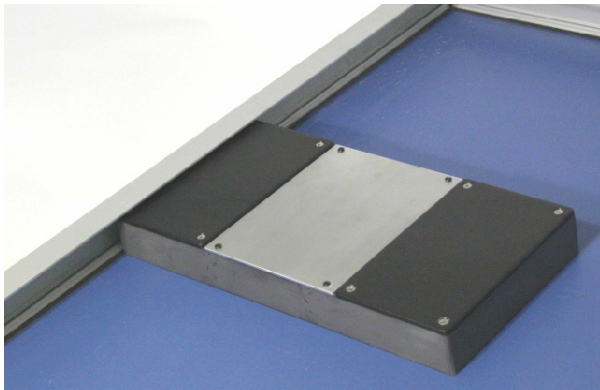
What is a PV AC Module?

An Exeltech PV AC module is a self-contained, UL-1741 compliant inverter that produces clean, sine-wave electricity for grid-tie applications without the complexity or expense common in large-inverter-based systems.

Advantages Over Conventional Grid-Tie Systems

50% reduction in wiring requirements! This eliminates:

- DC wiring
- DC cable trays
- DC fusing, overcurrent protection and required holders
- DC connectors
- DC ground-fault detection, protection, and devices
- DC surge protection
- DC combiner boxes
- DC junction boxes and connector blocks
- UL-related DC cabling issues
- PV Series (“blocking”) diodes
- PV module bypass diodes



Exeltech PV AC Module mounted to a PV panel. All DC wiring is enclosed in the compartment near the PV frame. The inverter is mounted in the center compartment. AC wiring is molded in and may be terminated with provided outdoor rated isolation displacement connector.

Additional Benefits of Exeltech PV AC Modules

- **No batteries** to purchase, maintain, or wear out!
- **More reliable** - single point failure does not disable entire system!
- **Simplified system assembly** - AC wiring connects directly to AC sub-panel with appropriate breaker!
- Incremental growth capability - no need to purchase many expensive modules at one time.
- Minimizes system design time and expense.
- Significantly decreases system power reduction events due to single-module shading.
- No large or heavy inverters to ship, handle, or mount.
- Easy to install and service - PV panel and inverter are integrated into one unit.
- No imbalance losses due to differences in PV output voltage or current.
- Anti-islanding protection built into every module (per UI1741).
- Microprocessor-controlled Maximum Power Point Tracking (MPPT) operates over entire DC input voltage range.
- Eliminates series connection problems where one defective component can affect the entire system.
- PV panel is not exposed to high voltage DC, which eliminates a potential source of arcing failures.

Electrical Specifications

- Total Harmonic Distortion (THD): < 2%
- Peak Efficiency: Greater than 91%
- Rated Power: several models available for panels up to 150W, 250W or 1000W
- Input: any PV standard panel voltage
- MPPT voltage range: Full DC input voltage range
- Output: 117VAC, 60 Hz (nominal)

Mechanical Specifications

- Size (in/mm): 1.3 h x 12.5 w x 6.25 d (33 x 318 x 159)
- Weight: Less than 2.5 lbs (1135 grams)
- Operating Temperature: -40°C (-40°F) to +90°C (+194°F)
(will be tailored to PV panel power output)

Certifications

- Designed to meet:
- UL 1741
- FCC Class B
- NEC 690



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(Specifications subject to change without notice.)