

Reliable power when and where you need it. Clean and simple.

Capstone Secure Power

Capstone's Secure Power is the most reliable and affordable microturbine-powered UPS solution available. Designed specifically for mission-critical loads, Secure Power produces clean, IT-grade power that offers eight 9s of reliability. Capstone offers two Secure Power products: UPSource, which offers efficient primary power that runs parallel to, yet independent of the grid, and Hybrid UPS, which offers dual-conversion power electronics via three modes – High Efficiency, Standard UPS and Emergency Backup.









CCHP and CHP

With Secure Power in a CCHP application, the microturbines' clean exhaust can be used to drive an absorption chiller to meet your data center's air conditioning needs. Alternatively, use Secure Power as a CHP application and utilize the waste heat energy to support your building's heating needs. Secure Power provides air conditioning that's virtually electricity-free and cuts operating costs. You can automatically switch between cooling and heating as needed with the advanced functionality and reliability of Capstone microturbines.



Secure Power: Microturbine-Powered UPS

- Clean-and-green (ultra-low exhaust emissions)
- 99.999999% availability
- IT-grade power
- Up to 90% fuel efficiency
- Multi-fuel capable
- Multiple power modules no single point of failure
- Low maintenance only one moving part, no coolants or lubricants
- No indoor floor space required (or associated costs)
- Expands to match load growth

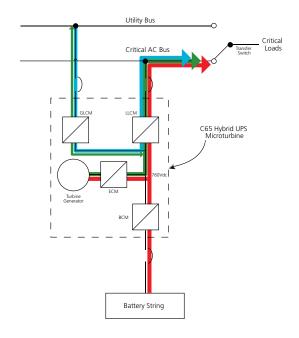
Secure Power Products: Hybrid UPS & UPSource

Hybrid UPS

With the Hybrid UPS solution, the utility is normally connected to the critical bus through the microturbines. Power for critical loads can be supplied through the microturbine, from the utility, or a combination of both.

Dual-conversion power electronics with three operating modes:

- High Efficiency Mode
- Standard UPS Mode
- Emergency Backup Mode

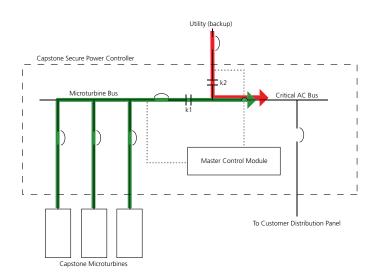


UPSource

In the UPSource solution, microturbines provide primary power to critical loads. The system will seamlessly switch to utility power as the backup in the unlikely event that the microturbines are not able to support the load.

Capstone microturbines deliver primary power and operate independently of the local utility 24/7.

- Prime Power Mode
- Emergency Backup Mode



Electrical Characteristics	UPS-80	UPS-250	UPS-580	C65 Hybrid UPS	
kVA/kW ⁽¹⁾	83/65	249/195	581/455	83/65	
Max Output Current ⁽²⁾	100A RMS	300A RMS	700A RMS	100A RMS	
Expandable to kVA/kW	332/260	664/520	664/520	830/650	
Voltage		400-480 W			
Electrical Service		3-phase, 4 Wire Wye			
Frequency		50/60 Hz			
Electrical Output Type		IGBT Inverter for All Models			
Current THD	5%, IEEE 519 compliant				

⁽¹⁾ Nominal full power performance at ISO condition: 15°C (59°F), 14.696 psia, 60% RH and 480V

⁽²⁾ Values are for base system (no expansion)

Capstone Turbine Corporation® is the world's leading developer and manufacturer of clean-and-green microturbine power generation systems, and was first to market with its high efficiency air bearing turbine technology. Capstone has shipped thousands of microturbines to customers worldwide. These innovative and award-winning systems have logged millions of documented runtime operating hours and are compliant with current and future emissions regulations.

With over 95 distributors worldwide, Capstone's low-emission microturbines serve multiple vertical markets with industry-leading reliability and efficiency. Capstone offers a comprehensive product lineup, providing scalable solutions from 30kW to 30MW.

Capstone is a member of the U.S. Environmental Protection Agency's Combined Heat and Power Partnership which is committed to improving the efficiency of the nation's energy infrastructure and reducing emissions of pollutants and greenhouse gases. A UL-Certified ISO 9001:2015 and ISO 14001:2015 company, Capstone is headquartered in the Los Angeles area with sales and/or service centers in the United States, Latin America, Europe, Middle East, China and Singapore.

For more information about Capstone's clean-and-green microturbine energy solutions, please visit www.capstoneturbine.com or call 818.734.5300.

