



Stabiliti 30C3



Smart power conversion for the energy revolution!
Ideal solution for C&I, AC & DC microgrids or electric vehicles, among others.

Innovative technology:

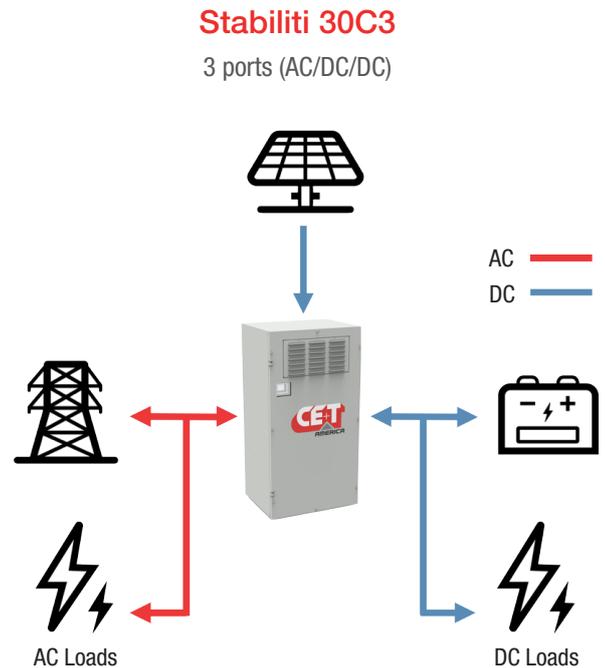
Stabiliti 30C3 is an innovative multiport power converter with **3 bidirectional ports (AC/DC/DC)** to easily interconnect **power sources** (grid, PV and batteries) and **loads** (AC or DC). Using a single multiport converter offers much easier systems **integration, control** and ongoing **maintenance** by simplifying system level hardware and software design. The enclosure is IP54 and can therefore be installed indoors or **outdoors**.

Battery life is extended through **galvanic isolation** (protection against grid disturbances) and built-in smart **algorithms** to minimize battery stress. The wide DC voltage range allows the use of **multiple storage** technologies such as lead-acid, lithium-ion, super-caps, aqueous batteries, flow batteries or flywheels. The galvanic isolation also maximizes **PV production** over the long-term, by reducing PID (Potential-Induced Degradation).

Applications:

The Stabiliti 30C3 can be used for energy management applications for:

- **Commercial and Industrial (C&I):**
 - Increase **self-consumption** of **renewable** energy
 - Minimize demand costs by peak shaving
 - **Be paid for grid support** (rejection and demand response)
 - **Backup power** for **AC & DC loads**
- **Microgrids:**
 - **Same advantages** as C&I solution but for **several consumers**
 - **Grid interactive** or completely **off-grid**
 - **Save fuel** for generators (Solar + Storage microgrid)
- **Electric vehicles:**
 - Integrate **renewable** energy, **energy storage** with **fast chargers**
 - **Reduce** energy costs and demand costs (via renewable and increased self-consumption)
 - **Supports Vehicle-to-Grid** "V2G" applications



Building blocks:

Stabiliti is a **30 kW modular power converter** that can be used to design systems of **up to 240 kW**.

Illustrations are non-binding and may include customized fittings.

Stabiliti 30C3

Model	Stabiliti 30C3
General	
Part Number	30C3
Size (W x H x D)	20.5" x 40" x 16" / 520 x 1016 x 406 mm
Weight	135 lbs / 61 kg
Enclosure protection	NEMA-3R / IP54 (powder-coated aluminum)
Mounting	Wall mount (vertical)
Wiring	Hinged access panel
Isolation between AC and DC ports	Galvanic isolation
North American Certifications	UL1741, UL1741SA and IEEE1547a
International Certifications	AS4777, CE (pending)
Compliances	CA Rule 21, PJM, RoHS and Reach
Supported SunSpec models	1, 103, 120, 121, 122, 123, 126, 129, 130, 132, 134, 135 and 136 (pending)
AC Grid port (In / Out)	
Output power	60 Hz: 30 kW / 50 Hz: 25 kW
Nominal current (maximum)	60 Hz: 37 A (44 A) / 50 Hz: 39 A (44 A)
Nominal output voltage (range)	3 x 480 Vac (422 to 528) / 3 x 400 Vac (334 to 440)
Nominal output frequency (range)	60 Hz (55 to 65 Hz) / 50 Hz (45 to 55 Hz)
Power factor (programmable range)	> 0.99 at rated output power (0.75 leading to 0.75 lagging)
Reactive power range (programmable)	+21 kVAR to -21 kVAR
Conversion efficiency (CEC*)	95.5% (95%)
Current harmonics	< 5% THD
Microgrid features	Voltage forming and load following / 240 kVA maximum
Microgrid black start	Integrated
DC Battery port (In / Out)	
Output power	30 kW
Output current	60 A
Output voltage range	100 to 1000 Vdc (derating below 500 Vdc)
Open-circuit voltage (Voc)	1000 Vdc
DC Filter	Integrated differential choke
DC Disconnect	External
Wiring configurations	Ground referenced (monopolar or bipolar) or floating
GFDI protection	1 A: fused
DC PV port (In / Out)	
Output power	30 kW
Output current	60 A
Output voltage range	100 to 1000 Vdc (derating below 500 Vdc)
Open-circuit voltage (Voc)	1000 Vdc
DC Filter	Integrated differential choke
DC Disconnect	External
Wiring configurations	Ground referenced (monopolar or bipolar) or floating
GFDI protection	1 A: fused
Monitoring and control	
Available control methods	Idle, net, power (grid and battery), current (battery) and MPPT (PV)
Monitoring / Control interfaces	RS-485 Modbus RTU - 2W / Modbus TCP over Ethernet
Fault logging	Saves all operating data when a fault occurs
Firmware updates	Remote via Telnet and FTP
Environmental	
Transient overvoltage protection	AC and DC MOVs in wiring tray
Operating temperature	-25 to 60°C (derating starting at 50°C)
Storage temperature	-40 to 85°C
Relative humidity	0 to 100% (non-condensing)
Cooling	Forced air (with variable speed fan)

* Based on California Energy Commission (CEC) efficiency calculation.

Stabiliti 30C3 - Datasheet - v1.1 Specifications can change without notice. New data will be updated on our website: www.cet-america.com.
The present equipment is protected by several international patents, trademarks and copyrights.