



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

Innovative technology:

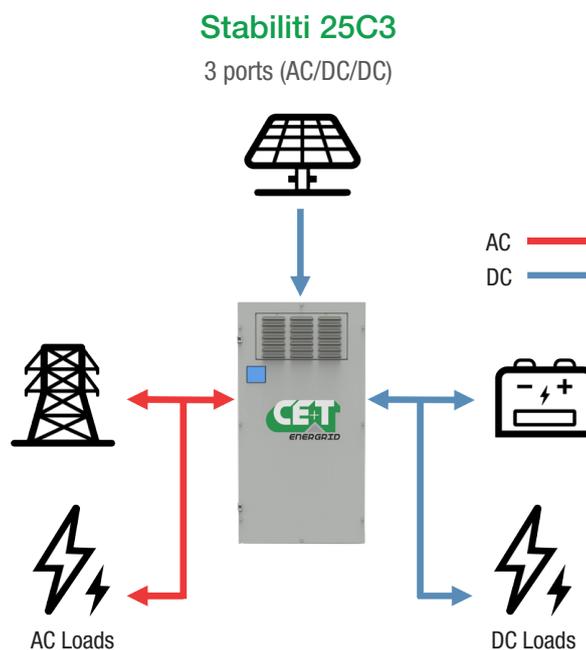
Stabiliti 25C3 is an innovative multiport power converter with **3 bidirectional ports** (AC/DC/DC) to easily interconnect **power sources** (grid, PV and storage unit) and **loads** (AC or DC). Using a single multiport converter offers much easier systems **integration, control** and ongoing **maintenance** by simplifying system level hardware and software design. The enclosure is **IP54** and can therefore be installed **indoor** or **outdoor**.

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 25C3 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** (re-injection 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 in any size
- Capable of off-grid operation (**tested up to 240 kW**)

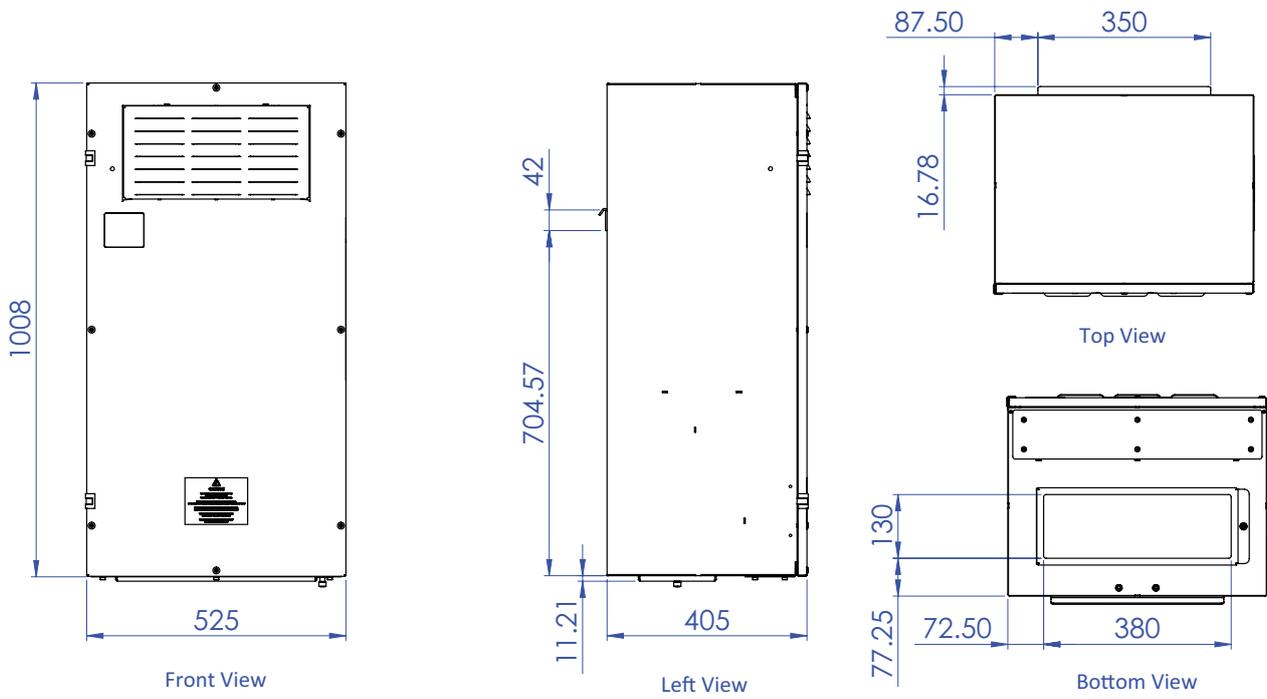
Illustrations are non-binding and may include customized fittings.

Stabiliti 25C3

Model	Stabiliti 25C3 (CE - 3x400 Vac & 100-1000 Vdc)	Stabiliti 25C3 (AS - 3x415 Vac & 100-1000 Vdc)
General		
Part Number	T831890201	T831990201
Size (W x H x D)	20.5" x 40" x 16" / 520 x 1016 x 406 mm	
Weight	141 lbs / 64 kg	
Enclosure protection	NEMA-3R / Ingress Protection IP54 (powder-coated aluminum)	
Mounting	Wall mount (vertical)	
Wiring	Hinged access panel	
Isolation between AC and DC ports	Galvanic isolation (AC to DC)	
International Certifications (Pending)	Grid interactive certifications: EN50549, AS/NS4777, C10/11 (EN50549/VDE-AR-4105/AS4777)	
Compliances	CE, RoHS and Reach	
AC Grid Interactive		
Output power	25 kW @3x400 Vac (30 kW with autotransformer 3x480 - 3x400 Vac optional)	
Nominal current (maximum)	50 Hz: 39 A (44A rms per phase)	
Nominal output voltage (range)	3x400 Vac (334 to 440)	3x415 Vac (334 to 440)
Nominal output frequency (range)	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	
Grid protection	Integrated AC disconnect	
Microgrid features	Voltage forming and load following	
Microgrid black start	Integrated	
DC Battery port (In / Out)		
Output power	30 kW maximum	
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	+ or - ground referenced mono-polar, 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	+ or - ground referenced monopolar, 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), DC Volts, DC Bus	
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 at AC & DC input terminal	
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)	

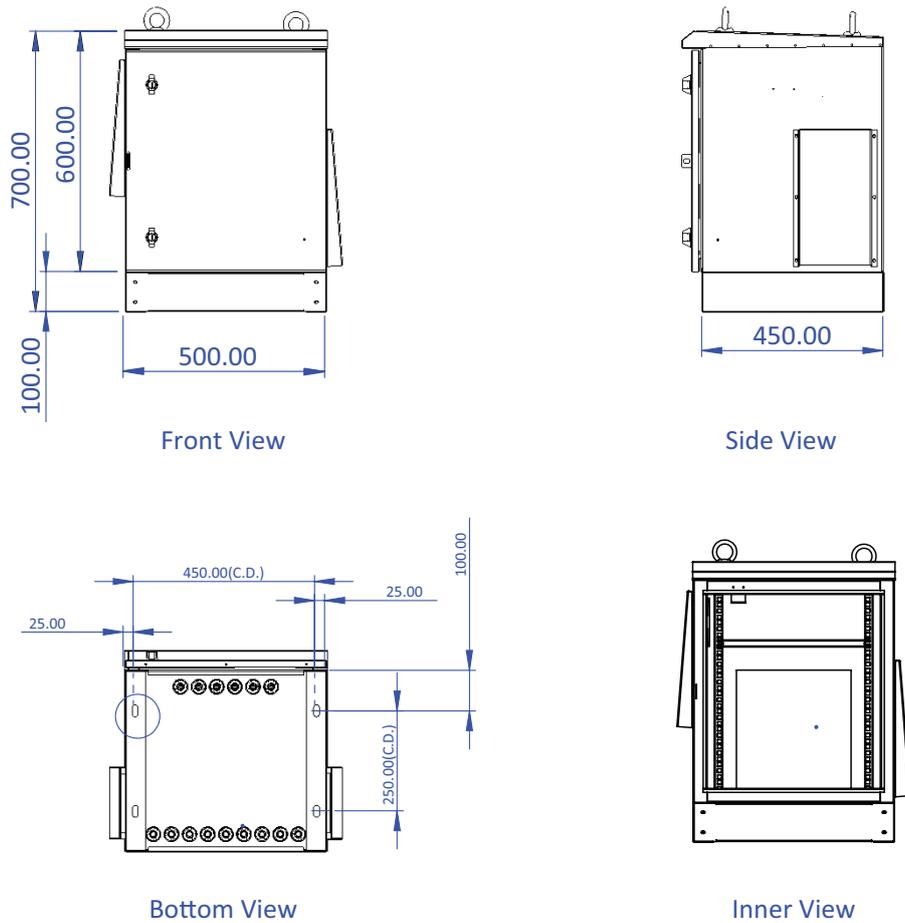
* Based on California Energy Commission (CEC) efficiency calculation.

Stabiliti System - Dimensions



Companion Box (Optional Autotransformer) - Dimensions

Part number - T834890000



Stabiliti 25C3 CE-AS - Datasheet - v1.0 Specifications can change without notice. New data will be updated on our website: www.cet-energrid.com. The present equipment is protected by several international patents, trademarks and copyrights.