



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

## Innovative technology:

Stabiliti 30C3-CE 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 **IP44** and can therefore be installed **indoor** or **outdoor**.

**Battery life** is **extended** through **galvanic isolation** (protection against grid disturbances). 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).

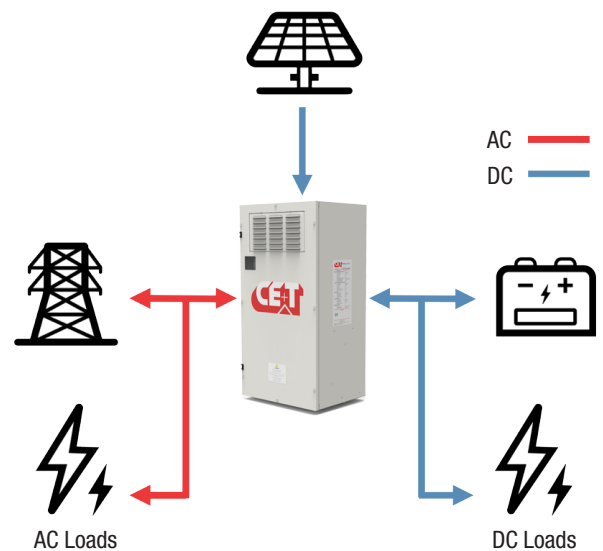
## Applications:

The Stabiliti 30C3-CE 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

## Stabiliti 30C3-CE

3 ports (AC/DC/DC)



## 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**)

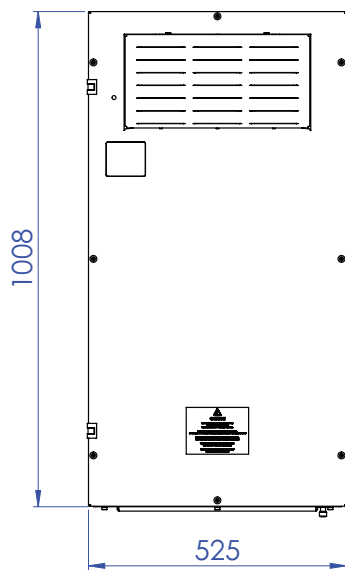
Illustrations are non-binding and may include customized fittings.

# Stabiliti 30C3-CE

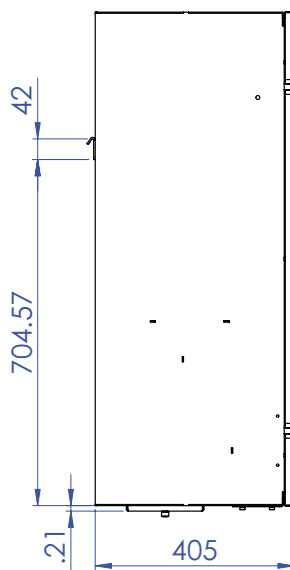
Model	Stabiliti 30C3-CE
<b>General</b>	
Part Number	T831890201
Size (W x H x D)	20.5" x 40" x 16" / 520 x 1016 x 406 mm
Weight	141 lbs / 64 kg
Enclosure protection	Ingress Protection IP44 (powder-coated aluminum)
Mounting	Wall mount (vertical)
Wiring	Hinged access panel
Isolation between AC and DC ports	Galvanic isolation (AC to DC)
International Certifications	Grid interactive certifications: EN50549-10, C10/11 and VDE-AR-4105
Compliances	CE, RoHS and Reach
<b>AC1 Bidirectional port - AC Grid Interactive port</b>	
Maximum Output power AC1 port	30 kW*
Nominal current (maximum)	50 Hz: 39 A (44A rms per phase max)
Nominal output voltage	3 x 400 Vac to 3 x 480 Vac*
Nominal output frequency (range)	50 Hz (45 to 55 Hz)
Power factor (programmable range)	> 0.99 at rated output power (0.8 leading to 0.8 lagging)
Reactive power range (programmable)	+21 kVAR to -21 kVAR
Apparent power range (programmable)	-28 to +28kVA (-30 to +30kVA @ 480VAC)
Conversion efficiency, AC1 to DC2 or DC3	94.5% @peak
Current harmonics	< 5% THD
Microgrid features	Voltage forming and load following
Microgrid black start	Integrated
<b>DC2 Bidirectional port - Battery default port</b>	
Maximum Power	45 kW (above 750Vdc – derating below)
Maximum Current	60 A
Conversion efficiency, DC2 to DC3	97.5% @peak
Operating Voltage range	200 to 1000 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
<b>DC3 bidirectional port - Auxiliary default port</b>	
Maximum Power	45 kW (above 750Vdc – derating below)
Maximum Current	60 A
Conversion efficiency, DC3 to DC2	97.5% @peak
Operating Voltage range	200 to 1000 Vdc
Open-circuit voltage (Voc)	1000 Vdc
DC Filter	Integrated differential choke
DC Disconnect	External
Wiring configurations	+ or - ground referenced monopolar, bipolar or floating
<b>Monitoring and control</b>	
Available control methods	AC1 port: Idle, Net, Grid Following, Grid Forming DC2 & DC3 port: Idle, Current, Power, Voltage, MPPT, Net
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
<b>Environmental</b>	
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)

\* 30 kW at 3x400 Vac require an autotransformer 3x400 to 3x480 Vac.

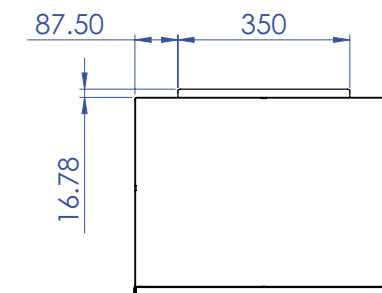
# Stabiliti System - Dimensions



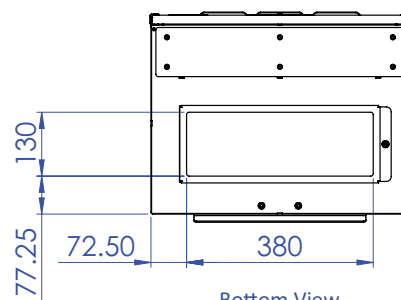
Front View



Left View



Top View



Bottom View

**Stabiliti 30C3-CE - Datasheet - v1.6** Specifications can change without notice. New data will be updated on our website: [www.cet-power.com](http://www.cet-power.com).  
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