

THE STABILITIM

30 KW MULTIPORT POWER CONVERSION SYSTEM

Model Number	30C3
Power Flows	DC DC
Microgrid Support	V
Grounded DC Configuration w/Fused GFDI Protection	V
Floating DC Configuration w/IMI Protection	V
Battery Support	V
Galvanic Isolation	V
PV MPPT Support	V
Bidirectional 2nd DC Power Port	V

Introducing Stabiliti™ 30C3, Ideal Power's newest grid-resilient multiport 30 kW power conversion system that unlocks ultimate project versatility. Stabiliti™ offers next generation technology leading the solar+storage revolution. What makes Stabiliti™ different?

- A multiport with flexible power flows, including: PV to Storage, PV+Storage to Grid, Grid to Storage, as well as AC & DC microgrid applications.
- Full galvanic isolation for protection against unexpected equipment failure by eliminating the possibility of unwanted fault current between AC & DC.
- Versatility to plug into power grids around the world; integrate multiple sources of generation and storage simultaneously for higher power & backup; facilitate EV fast charging with buffer batteries; and enable peak shaving & demand management applications—all in one box.



Stabiliti ™ Multiport (AC-DC-DC) **Power Conversion System**

Specifications*



PORT AC1: Bidirectional AC US & Canada

Wiring Configuration 3 wire delta Maximum AC Power 29 99 kW Nominal AC Current 37 A 44 Δ Maximum AC Current **Nominal Output Voltage** 480 Vac

Output Voltage Range 422 Vac to 528 Vac

60 Hz **Nominal Output Frequency**

Frequency Range 55 Hz to 65 Hz

Nominal Power Factor > 0.99 at rated output power

Power Factor Range Programmable: 0.95 leading to 0.95 lagging **Reactive Power Range** Programmable: +18 kVAR to -18 kVAR

CEC Efficiency 95% **Peak Efficiency** 95.5% **Current Harmonics** < 5% THD

Microgrid / Parallel Microgrid Operation Yes: Voltage Forming / Load Following

Integrated Microgrid Blackstart

Available Control Methods IDLE, NET, GRID POWER, FACILITY POWER

PORT DC2: Battery PORT DC3: Battery or PV

Maximum DC Power 30 kW **Maximum DC Current** 60 A Absolute Max Voltage (Voc) 1000 Vdc

Operating Voltage Range 100 Vdc to 1000 Vdc **Full Power Voltage Range** 500 Vdc to 1000 Vdc **Integrated DC Filter** Yes: Differential Choke

Integrated DC Disconnect

Wiring Configurations Grounded Monopolar / Grounded

Bipolar / Floating

GFDI protection 1 A: fused

Available Control Methods IDLE, NET, POWER, CURRENT

Available Control Methods

Environmental

Enclosure Size

Transient Overvoltage Protection AC and DC MOVs in wiring tray

Operating Temperature Range -25 to 50°C full power, derated > 50°C

Storage Temperature Range -40 to 85°C (non-operating) **Relative Humidity Range** 0 to 100% (non-condensing) Cooling Forced convection with variable

speed fan

20.5"W x 40" H x 16"D

General

Maximum DC Power

Maximum DC Current

Absolute Max Voltge (Voc)

Operating Voltage Range

Full Power Voltage Range

Integrated DC Disconnect

Certification and Standards UL1741, IEEE1547a, and IEC62109-1, 2

SunSpec Smart Inverter Features &

CA Rule 21, HECO, PJM Compliant

RoHS and REACH Compliant

Remote FW Updates

Wiring Configurations

GFDI protection

UL1741SA

Integrated DC Filter

Weight ~135 lbs

Mounting Wall Mount (must be vertical),

brackets included

Enclosure Rating / Material NEMA-3R / powder-coated aluminum

Hinged wiring access panel Yes

Galvanic Isolation between Yes **AC and DC Ports**

Limited Warranty 10 Year North America, 5 Year International

30 kW

1000 Vdc

100 Vdc to 1000 Vdc

500 Vdc to 1000 Vdc

Yes: Differential Choke

DC3 & DC2 use the same common return,

IDLE, NET, POWER, CURRENT, MPPT

132, 134, 135, and 136-Pending

therefore both DC2 & DC3 must both be floating

Models: 1, 103, 120, 121, 122, 123, 126, 129, 130,

60 A

Nο

or grounded

1 A: fused

Pending

Yes

Black Box Recorder Yes Spare Package (FRUs) Available

Monitoring/Control Interfaces RS-485 Modbus RTU - 2W / Modbus TCP over

Ethernet

Supported Power Flows PV → Grid, PV → Grid+Batt, PV+Batt → Grid

 $PV+Grid \rightarrow Batt, Grid \leftrightarrow Batt$

