IQ Battery C80

IQ Battery C80 is an all-in-one, AC-coupled energy storage system that's compact, powerful, reliable, and safe. It delivers 80 kWh of energy capacity and up to 40 kVA of continuous power in an elegant enclosure with fully integrated battery packs and microinverters. With its distributed architecture and modular design, customers can right-size and scale to meet diverse energy goals with high efficiency and uptime.



Enphase 15 year limited warranty

Key specifications	IQ-BT-C80-V5-R3 (277Y/480 V)	IQ-BT-C80-V6-R3 (120Y/208 V)
AC output power	40 kVA	33 kVA
Rated output current	48 A	91.7 A
Phase; wires	Three-phase; 4-wire	
Nominal frequency	60 Hz	
Rated capacity	80 kWh	
Ambient operating temperature range	–22°F to 131°F (–30°C to 55°C)	
Chemistry	Lithium iron phosphate (LFP)	
Mounting	Pad/Floor mount	
AC round-trip efficiency	>90%	

Powerful

- Distributed microinverter-based architecture for the highest uptime
- Starts at 80 kWh/40 kVA and scales to multi-MWh as needs grow
- Exceptional energy capacity per square foot with the AC-coupled design

Reliable

- Industry-leading 15-year warranty up to 7,000 cycles
- Domestic-content and FEOC compliant
- Modular components designed for maximum field serviceability

Simple

- Active cooling without liquid or HVAC for higher reliability and lower internal losses
- Battery module level heating for better performance

Safe

- Battery-module smoke and gas sensing and active pressure release
- UL 9540A and large-scale fire-tested for thermal runaway safety
- Supports integration with unit-level fire alarm or site-level fire alarm control panel and emergency stop for safe isolation

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Product details	Units	IQ Battery C80	
Order code	—	IQ-BT-C80-V5-R3 (277Y/480 V) IQ-BT-C80-V6-R3 (120Y/208 V)	
Output AC		**IQ-BT-C80-V5-R3 (277Y/480 V)**	**IQ-BT-C80-V6-R3 (120Y/208 V)**
AC output power	kVA	40	33
Rated output current	A	48	91.7
Peak output current (10 seconds)	A	77	147
Peak output current (3 seconds)	A	96	183
Power Start capability (LRA)	A	143.3	273.6
Phase; wires	—	Three-phase; 4-wire	
Nominal frequency	Hz	60	
AC round-trip efficiency	%	>90	
C-rate	—	0.5	
Power factor (adjustable)	—	0.8 lagging ... 0.8 leading	
Total harmonic distortion	%	<3	
Battery module			
Chemistry	—	Lithium iron phosphate (LFP)	
Cell ampacity	Ah	314	
Battery module configuration	—	16S1P	
Nominal DC voltage	V	51.2	
Rated capacity	kWh	80[1]	
Depth of discharge	%	97.5[1]	
Ambient operating temperature range	°F (°C)	–22 to 131 (–30 to 55)	
Mechanical data			
Dimensions (W × H × D)	in (mm)	36.2 × 78.7 × 31.5 (920 × 2,000 × 800)	
Weight	lb (kg)	2,315 (1,050)	
Noise	dBA	≤70[2]	
Enclosure	—	Outdoor NEMA 3R	
Cooling	—	Forced air cooling	
Heating	—	Battery module heaters	
Mounting	—	Pad/Floor mount	
Altitude	ft (m)	Up to 9,842 (3,000)	
Relative humidity	%	5–95	
Corrosion resistance	—	C4	
Seismic category	—	D	
Connectivity interface	—	Ethernet (RJ45)	

[1] The rated capacity includes a safety-critical limit of 2.5% that safeguards the customer's asset in case of a long-duration grid outage. Depth of discharge excludes the 2.5% buffer.
[2] When all fans are on.

Operation and interfaces	
Communication	SunSpec Modbus; IEEE 2030.5
Monitoring	Enphase Installer Platform; API integration
Services	Peak Shaving, ToU Shifting, Self-Consumption, Grid Services, VPP, Backup (future release)

Standards	
Compliance	UL 1741 SA/SB, NFPA, CSA/ANSI C800:25, IEEE 1547, UL 9540, UL 9540A, UL 1973, UL 1642, UL 3141, UN 38.3, FCC Part 15, ASCE 7-16, Prop 65

Compatibility	
IQ Gateway Commercial Pro	GW0-1CL-1N-D0-0R[3]
Solar inverters	Compatible with IQ8P-3P, IQ8H-3P (120Y/208 V), IQ9N-3P (277Y/480 V) Microinverters and third-party commercial three-phase PV inverters

Related products	SKU	Description
IQ Battery C80 with wiring extension box	IQ-BT-C80-V5-R3-WEB (277Y/480 V) IQ-BT-C80-V6-R3-WEB (120Y/208 V)	Battery with wiring extension box—used to aggregate multiple IQ Battery C80 units in a single circuit

For guidance on installation, system planning, and layout, contact your Enphase sales representative.
Designed in the United States, India, and New Zealand.
Made in the USA from imported parts.
Manufactured by Enphase Energy.

[3] Compatible with multi-gateway architecture depending on site requirements.

Revision history

Revision	Date	Description
DSH-00925-5.0	August 2026	Editorial updates.
DSH-00925-4.0		
DSH-00925-3.0	July 2026	Updated the following SKUs. • IQ-VT-80-V1-R1 to IQ-VT-80-V5-R3 • IQ-VT-80-V2-R1 to IQ-VT-80-V6-R3
DSH-00925-2.0	April 2026	Initial release.
DSH-00925-1.0	March 2026	Preliminary release.