

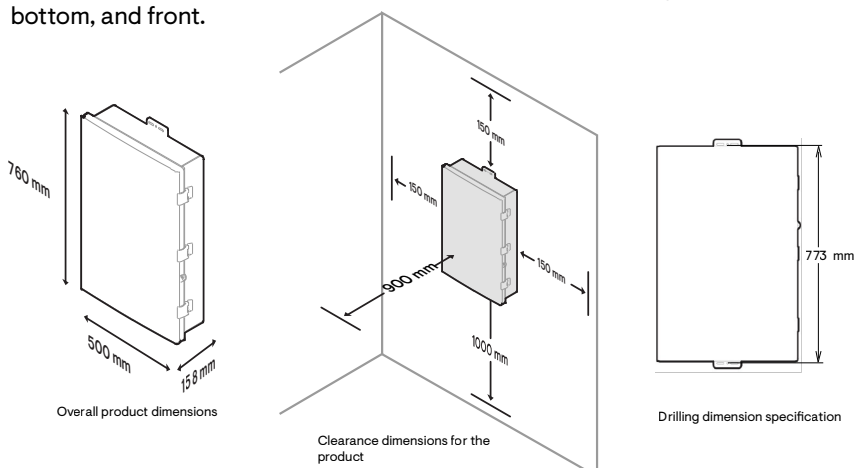
# IQ System Controller 3 INT

The IQ System Controller 3 INT connects homes to the public grid, IQ Battery 5P, and IQ7 or IQ8 Microinverters. It features an automatic transfer switch (ATS) that switches from grid to backup power during outages. The system consolidates interconnection equipment, IQ Gateway Metered, and IQ Relay functionalities into one enclosure, enhancing grid-independent capabilities with a pre-wired solution, including CTs.



Key specifications	SC100G-M230ROW
Nominal voltage	230 VAC (Line-to-Neutral) 400 V (Line-to-Line)
Maximum continuous grid current per phase	80 A
Maximum PV/IQ Battery current per phase	80 A
Maximum backup load current per phase	80 A
Supported Earthing systems	TN-C-S, TN-S, TT
Backup operation	Single-phase/Three-phase
Dimensions (H × W × D)	760 mm × 500 mm × 158 mm
Weight	15.2 kg
Enclosure environmental rating	Outdoor, IP55, polycarbonate construction

Install IQ System Controller 3 INT with clearance at the left, right, top, bottom, and front.



## Simple

- Supports three-phase and single-phase configurations for solar and grid
- Supports conduit entry from the bottom, rear, left, and right
- Supports IQ8, IQ7, and S Series Microinverters
- Supports main circuit breaker up to 80 A
- Pre-wired CTs on PV and grid terminals for ease of wiring
- Field replaceable components
- Integrated IQ Gateway board, Production CT, Consumption CT, and IQ Relay functionality

## Reliable

- Durable IP55 enclosure
- 10-year limited warranty

## Smart

- Controls safe connectivity to the grid
- Detects power cuts automatically
- Provides near seamless transition to backup
- Uses wired communication for fast and consistent connection
- Installs and commissions easily
- Offers homeowners remote monitoring and control from the Enphase App

Product details		Order code: SC100G-M230ROW
Description		IQ System Controller 3 INT includes an automatic transfer switch (ATS), Integrated IQ Gateway, Production and Consumption CTs, IQ Relay functionalities, and a Mobile Connect device. It streamlines the grid-independent capabilities of PV and storage installations. It also includes a System Shutdown Switch (SC-INT-SSD-KIT) to safely turn off the system and an Enphase Mobile Connect CELLMODEM-M1-06-AT-05 or CELLMODEM-07-INT-05 (with a 5-year data plan) to ensure backup internet connectivity <sup>1</sup>
Electrical specifications	Units	
Nominal voltage	VAC	230 (Line-to-Neutral), 400 (Line-to-Line)
Nominal voltage range	VAC	184–276 (Line-to-Neutral), 320–480 (Line-to-Line)
Feed-in type	—	Single-phase/Three-phase
Voltage measurement accuracy	VAC	±1.8
Overvoltage category	—	Category III
Nominal frequency/range	Hz	50/47–52
Maximum continuous grid current per phase	A	80
Maximum PV/IQ Battery current per phase	A	80
Maximum backup load current per phase	A	80
Environment	—	B
Backup operation	—	Single-phase/Three-phase
Maximum overcurrent protection device rating for IQ Gateway	A	16; installed and pre-wired along with IQ System Controller 3
Load transition time <sup>2</sup>	ms	0
Maximum power quality variation time <sup>2</sup>	ms	30
Maximum grid isolation time <sup>3</sup>	ms	120
Operating modes	—	Self-Consumption: Use stored solar to power your home after the sun goes down. The battery is used when the solar is not available Full Backup: 100% of the battery is reserved for backup
Supported Earthing systems		TN-C-S, TN-S, TT
Auxiliary contact for load control and excess PV control		2 × Type NO and 2 × Type NC, 230 VAC RMS/24 VDC, 1 A
Mechanical data	Units	
Dimensions (H × W × D)	mm	500 mm × 760 mm × 158 mm
Weight	kg	15.2
Circuit breaker space (DIN rail)	—	DER side: Space for 10 single-pole breakers Mains and backup side: Space for eight single-pole breakers
Mounting options	—	Wall mount
Ambient temperature range	°C	–40 to 50
Operating humidity (RH)	%	Up to 100, condensing

<sup>1</sup> Enphase requires Wi-Fi or Ethernet as a primary mode of interconnectivity for any system with IQ Battery 5P.

<sup>2</sup> This refers to load disruption during grid blackout. When transitioning to backup, the total power of the IQ Battery installed needs to be greater than the loads present. Load disruption time may vary based on other grid conditions. Contact Enphase Support for more details.

<sup>3</sup> Refers to the time from which grid outage happens to the time when grid (ATS/MID) relays open up.

Mechanical data		Units	
Cooling	—		Natural convection, solar shield
Enclosure environmental rating	—		Outdoor, IP55, polycarbonate construction
Altitude	m		Up to 2000
Warranty			
Limited warranty (restrictions apply)			Up to 10 years (SC-INT-SSD-KIT and CELLMODEM-M1-06-AT-05 or CELLMODEM-07-INT-05 have a 5-year warranty)
What's in the box			
IQ System Controller 3 INT			System controller unit with microgrid interconnect device
System Shutdown Switch			Switch to shut down the Enphase Energy System
Circuit breakers			1-pole IQ Gateway reset breaker
Accessories kit			IQ System Controller 3 INT quick install guide (QIG), breaker filler plate
Mobile Connect cellular modem			Cellular modem along with a 5-year data plan to ensure backup internet connectivity
Accessories and replacement parts			
SC-IQG-PCBA-ROW			IQ Gateway board for field replacement
SC-ECB-PCBA-ROW			Embedded controller for field replacement
SC-PRB-SUB-ROW			Power relay board for field replacement
SC-IOB-PCBA-ROW			Interface board or I/O board with dry contacts for field replacement
SC-MRA-SUB-ROW			Mains relay assembly for field replacement
Circuit breakers (as needed)			DIN rail mounted. Not included, must order separately.
SC-INT-SSD-KIT			System Shutdown Switch for solar and battery systems. Turns off the system and prevents microgrid formation
CELLMODEM-M1-06-AT-05 or CELLMODEM-07-INT-05			Cellular modem to provide backup internet connectivity to the Enphase Energy System
Compatibility			
Battery			IQ Battery 5P (IQBATTERY-5P-1P-ROW/IQBATTERY-5P-3P-INT)
Microinverters			IQ8 Series, IQ7 Series, or S Series
Compliance			
Safety			AS/NZS IEC 61439-2, IEC 60947-6-1
EMC and radio equipment			RCM, IEC 61000-6-1, IEC 61000-6-3, EN 55024, EN 300 328, EN 300 440, EN 301 489-1, EN 301 489-17, EN 301 489-52, EN 301 511, EN 301 893, EN 301 908-1
Performance			AS/NZS 4777.2:2020 + A2
Wire sizes			
Connections (all lugs are rated to 90°C)	Main lugs and backup load lugs		Cu: 2.5 mm <sup>2</sup> to 35 mm <sup>2</sup>
Neutral and ground bars	Large holes		2.5 mm <sup>2</sup> to 35 mm <sup>2</sup>
	Small holes		2.5 mm <sup>2</sup> to 15 mm <sup>2</sup>

Assembled in China

Manufacturer: Enphase Energy Inc., 47281 Bayside Pkwy., Fremont, CA, 94538, United States of America, PH: +1 (707) 763-4784

Importer: Enphase Energy Aust. Pty/Ltd., 88 Market St., South Melbourne VIC 3205, PH: +61 3 86691679

# Components of the Enphase Energy System



## Microinverters

Microinverters pack more power into less space than other rooftop solar systems and make rooftop solar more productive, reliable, smart, and safe.



## IQ Battery 5P with FlexPhase

IQ Battery 5P's all-in-one AC-coupled storage system is powerful, reliable, simple, and safe. It has a total usable energy capacity of 5.0 kWh and includes embedded IQ8T-BAT Microinverters for reliable operation.



## IQ Battery 5P

Powerful and fully integrated AC Battery with 5 kWh capacity. Includes six embedded IQ8D-BAT Microinverters for high reliability.



## Mobile Connect cellular modem

Mobile Connect cellular modem provides plug-and-play connectivity to the Enphase Installer Platform. It is preconfigured for data service and becomes activated when connected to the IQ System Controller 3 INT.



# Revision history

Revision	Date	Description
DSH-00008-4.0	June 2025	<ul style="list-style-type: none"><li>• Editorial updates.</li><li>• Updated “Product details”, “Electrical specifications”, “What’s in the box”, “Warranty”, “Accessories and replacement parts”, and “Compliance” sections.</li><li>• Added “Components of the Enphase Energy System” section.</li></ul>
DSH-00008-3.0	February 2024	Updated “Electrical specifications” and “Compliance” sections.
DSH-00008-2.0	July 2023	<ul style="list-style-type: none"><li>• Added new sections “What’s in the box” and “Compatibility”.</li><li>• Updated the sections “Electrical specifications” and “Accessories and replacement parts”.</li></ul>
DSH-00008-1.0	May 2023	Initial release.