ENPHASE

UNITED KINGDOM | DATA SHEET

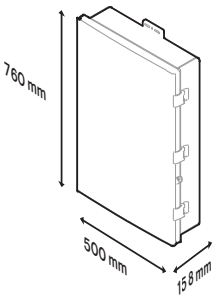
IQ System Controller 3 INT

The IQ System Controller 3 INT 100 A 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 power outages. The system consolidates interconnection equipment and IQ Gateway Metered into a single enclosure, enhancing grid-independent capabilities with a pre-wired solution, including CTs.

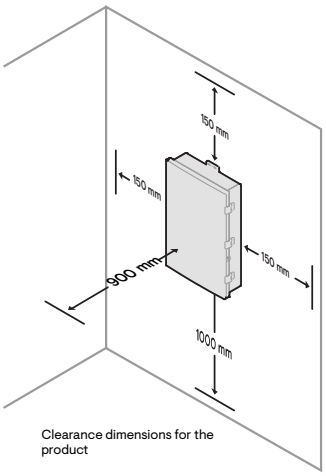
Enphase 10 year limited warranty

CE

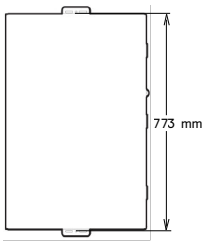
Key specifications	SC100G-M230-3P
Nominal voltage	230 VAC (Line-to-Neutral) 400 VAC (Line-to-Line)
Maximum continuous grid current per phase	100 A (single-phase) 80 A (three-phase)
Maximum PV/IQ Battery current per phase	100 A (single-phase) 80 A (three-phase)
Maximum backup load current per phase	100 A (single-phase) 80 A (three-phase)
Supported Earthing systems	TN-C-S, TN-S, TT
Backup operation	Three-phase/Single-phase
Dimensions (H × W × D)	760 × 500 × 158 mm
Weight	15.2 kg
Enclosure environmental rating	Outdoor, IP55, polycarbonate construction



Overall product dimensions



Clearance dimensions for the product



Drilling dimension specification

Simple

- Supports three-phase and single-phase configurations for solar and grid
- Supports conduit entry from the bottom, rear, left, and right
- Supports IQ7 and IQ8 Microinverters
- Supports main circuit breaker up to 100 A (single-phase) and 80 A (three-phase)
- Pre-wired CTs on PV and grid terminals for ease of wiring
- Field replaceable components
- Integrated IQ Gateway board, Production, and Consumption CTs

Reliable

- IP55 outdoor rated enclosure
- 10-year limited warranty

Smart

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

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Product details	Order code: SC100G-M230-3P
Description	IQ System Controller 3 INT 100 A includes an automatic transfer switch (ATS), an integrated IQ Gateway, Production and Consumption CTs, and a Mobile Connect device. It streamlines the grid-independent capabilities of PV and storage installations. Also includes a System Shutdown Switch (SC-INT-SSD-KIT) to safely turn off the system and an Enphase Mobile Connect CELLMODEM-07-INT-05 (with a 5-year data plan) to ensure backup internet connectivity.[1]

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	—	Three-phase/Single-phase
Voltage measurement accuracy	VAC	±1.8
Overvoltage category	—	Category III
Nominal frequency	Hz	50
Nominal frequency range	Hz	47–52
Maximum continuous grid current per phase	A	100 (for a single-phase connection across L1 and N) 80 A (three-phase)
Maximum PV/IQ Battery current per phase	A	100 (for a single-phase connection across L1 and N) 80 (three-phase)
Maximum backup load current per phase	A	100 (for a single-phase connection across L1 and N) 80 (three-phase)
Environment	—	B
Backup operation	—	Three-phase/Single-phase
Maximum overcurrent protection device rating for IQ Gateway	A	16; installed and pre-wired along with IQ System Controller 3 INT
Load transition time[2]	ms	0
Maximum power quality variation time [2]	ms	30
Maximum grid isolation time[3]	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
Maximum input short circuit current	kA	5

Conductor sizes	Units		
Connections (all terminals are rated to 90°C)	mm^2	Main terminals and backup load terminals	2.5 to 35
Neutral and ground bars	mm^2	Large terminals	2.5 to 35
		Small terminals	2.5 to 16

[1] Enphase requires Wi-Fi or Ethernet as a primary mode of interconnectivity for any system with IQ Battery 5P. Refer to the IQ Gateway data sheet for details.
[2] This refers to load disruption during a power outage. 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.
[3] Refers to the time from when the grid outage happens to the time when the grid (ATS/MID) relays open up.

Mechanical data	Units	
Dimensions (H × W × D)	mm	760 × 500 × 158
Weight	kg	15.2
Circuit breaker space (DIN rail)	—	PV and battery storage side: Space for 10 single-pole breakers Mains and backup side: Space for 8 single-pole breakers
Mounting options	—	Wall mount
Ambient temperature range	˚C	-40 to 45
Operating humidity (non-condensing)	%	Up to 100
Cooling	—	Natural convection
Enclosure environmental rating	—	Outdoor, IP55, polycarbonate construction, fire-rated to UL 94 V-0
Altitude	m	<2000

Limited warranty	
IQ System Controller	10 years
System Shutdown Switch	5 years
Mobile Connect	5 years

What's in the box	
System Shutdown Switch	Switch to shut down the Enphase Energy System
Accessories kit	Quick install guide (QIG), circuit breaker filler plates, and wiring kit
Mobile Connect	Cellular modem, along with a 5-year data plan to ensure backup internet connectivity
IQ System Controller 3 INT 100 A	System controller unit with automatic transfer switch (ATS), IQ Gateway, Production and Consumption CTs, and Communications Kit functionality.

Accessories and replacement parts	
SC-IQG-PCBA-INT-100A	IQ Gateway board for field replacement
SC-ECB-PCBA-INT-100A	Embedded controller for field replacement
SC-PRB-SUB-INT-100A	Power relay board for field replacement
SC-IOB-PCBA-INT-100A	Interface board or I/O board with dry contacts for field replacement
SC-MRA-SUB-INT-100A	Mains relay assembly for field replacement
SC-INT-SSD-KIT	System Shutdown Switch for solar and battery systems. Turns off the system, prevents microgrid formation, and brings the circuit down to touch-safe voltage for safe service
CELLMODEM-07-INT-05	Cellular modem to provide backup internet connectivity to the Enphase Energy System

Compatibility	
Battery	IQ Battery 5P (IQBATTERY-5P-1P-INT/IQBATTERY-5P-3P-INT)
PV	IQ7 Series, IQ8 Series, M Series Microinverters, or string inverter [4]

Communication interfaces	
Communication	Wired control communication
Monitoring	Enphase Installer Platform and Enphase App monitoring options; API integration

Standards	
Safety	IEC 61439-2, IEC 60947-6-1

[4] M Series Microinverters/String inverters need to be connected using an external contactor and will be switched off when off-grid. Refer to the system planning guide for more information.

Standards	
EMC and radio equipment	EN 50065-1, EN 61000-6-2, EN 50065-2-2, EN 301 489-1
Performance	United Kingdom: G100-2
EC Declaration of Conformity	Electro Magnetic Compatibility (EMC) Directive 2014/30/EU, Low Voltage Directive (LVD) 2014/35/EU, Restriction of Hazardous Substances (RoHS), 2011/65/EU
Product labelling	CE

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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

Fully integrated AC battery system. Includes six field-replaceable IQ8D-BAT Microinverters.

Revision history

Revision	Date	Description
DSH-00801-2.0	November 2025	Initial release.
DSH-00801-1.0	May 2025	Preliminary release.