



IQ Gateway M

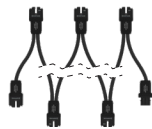
The IQ Gateway M is the platform for energy management and integrates with the IQ Microinverters to provide complete control and insights into the Enphase Energy System.

The IQ Gateway M delivers solar production and energy consumption data to the Enphase App monitoring and analysis software for comprehensive, remote maintenance and management of the Enphase Energy System.



IQ Microinverters

High-powered smart grid-ready IQ7+ and IQ7A Microinverters dramatically simplify the installation process while achieving the highest system performance.



IQ Cabling

Install microinverters quickly and safely with IQ Cabling. With multi-phase IQ Cabling, the installed capacity is automatically distributed evenly across all three phases.

Smart

- Enables web-based monitoring and control
- Supports bidirectional communications for remote upgrade

Simple

- Easy system configuration using the Enphase Installer App
- Flexible networking with Wi-Fi, Ethernet, or mobile
- DIN rail mount

Reliable

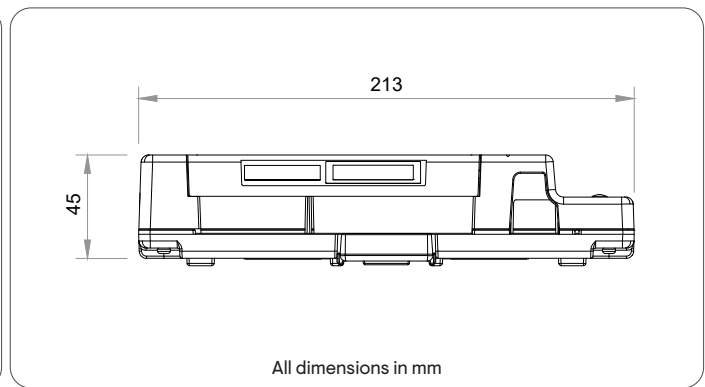
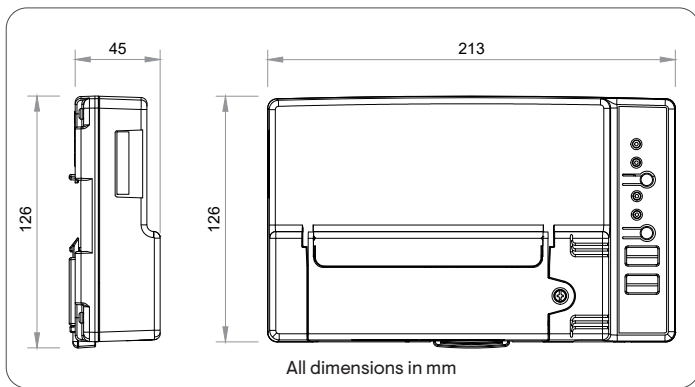
- Designed for installation indoors or in an outdoor enclosure
- 5-year warranty



Enphase IQ Gateway M

MODEL NUMBER	UNITS	ENV-S-AM1-230-60
IQ Gateway M ENV-S-AM1-230-60		Communications gateway with integrated PV and consumption metering. Includes two CTs (200 A primary circuit current).
POWER REQUIREMENTS	UNITS	
Hard-wired		230 VAC or 380 Y/220 VAC or 400 Y/230 VAC, 60 Hz Max 20 A over current protection required
Maximum power consumption	W	5
Average continuous power consumption	W	3
CAPACITY	UNITS	
Number of microinverters polled		Up to 300
MECHANICAL DATA	UNITS	
Dimensions (H×W×D)	mm	126 × 213 × 45
Weight	kg	0.5
Ambient temperature range	°C	-40 to 65 -40 to 46 if installed in an enclosure
Environmental rating		IP30. For installation indoors or in an IP54-rated (or better) enclosure.
Altitude	m	2600
USB ports		Two USB 2.0 ports, auto-sensing, auto-negotiation (connect Enphase devices only)
Mounting		DIN rail
DIN rail units width		12 modules
Relative humidity		85%
Overvoltage class AC port		III
Overvoltage class relay port		II
AC terminal block		N, L1, L2, L3 up to 6 mm ²
CT terminal block		Six double terminals, up to 1.5 mm ²
Digital I/O terminal block		Five terminals, up to 1.5 mm ²
COMMUNICATION INTERFACES	UNITS	
Integrated Wi-Fi		802.11b/g/n (2.4 GHz, 5 GHz), for connecting the Enphase cloud via the internet.
Wi-Fi range (recommended)	m	10
Ethernet		Optional, 802.3, Cat5E (or Cat 6) UTP Ethernet cable (not included), for connecting to the Enphase Cloud via the internet.
Digital I/O		Digital input/output for grid operator control
Access point (AP) mode		For a connection between the IQ Gateway and a mobile device running the Enphase Installer App
Metering ports		Up to three Consumption CTs and three Production CTs.
Power line communication (PLC)		90–110 kHz (Class B), to microinverters.
Web API		Refer to https://developer-v4.enphase.com
Local API		Refer to guide for local API
LED indicators		From top to bottom: Cloud connectivity, Wi-Fi access point mode, PV production state, PLC communications state
Configured via		Enphase Installer App and Enphase Installer Platform
COMPLIANCE	UNITS	
Compliance		IEC/EN 61010-1:2010, EN50065-1, EN61000-4-5, EN61000-6-1, EN61000-6-2
SCOPE OF DELIVERY	UNITS	
Package dimensions (H × W × D)	mm	160 × 276 × 98.
Package weight	kg	1
Aluminium DIN rail	mm	125
Current Transformers (CTs)		Two CT-100-SPLIT included

POWER PRODUCTION/EXPORT LIMITING VIA THE IQ GATEWAY'S DIGITAL IO		UNITS
Maximum relays read		4
Capabilities supported		Power production limiting (Production CT/s required), power export limiting (Production CT/s required and Consumption CT/s - "Load with Solar" configuration)
Minimum IQ Gateway version		v7.3.120
Cable configurations		18 AWG, UL-Std.62, 600 V, 105°C, and min 0.76 mm average thickness
Signal voltage range	V	2.5-5 (digital high), 0-1.9 (digital low)
Terminal blocks		Five terminals, up to 1.5 mm ²
Configuration via		Enphase Installer App and Enphase Installer Platform (via "Site Settings")
COMPATIBILITY		UNITS
Microinverter		IQ7 Series Microinverters



IQ Gateway M accessories (order separately)



CT-100-SPLIT Current Transformers (CTs)

Pack of four 200 A rated split-core current transformers (CT), with accuracy $\pm 1\%$. For use with IQ Gateway M in multi-phase applications or with larger section conductors.

To learn more about Enphase offerings, visit enphase.com

Revision history

REVISION	DATE	DESCRIPTION
DSH-00137-1.0	June 2023	Initial release