

IQ Gateway Commercial 2

The IQ Gateway Commercial 2 delivers solar production and energy consumption data to Enphase App, the monitoring and analysis software for comprehensive, remote maintenance and management of IQ8 Commercial Microinverter based PV systems.

With integrated revenue-grade production metering and optional consumption monitoring, the IQ Gateway Commercial 2 is the platform for total energy management and integrates with the IQ8 Commercial Microinverters.



IQ8 Commercial Series Microinverters Extra high-powered, smart grid-ready microinverters designed to match larger format commercial PV modules.

Smart

- Enables web-based monitoring and control
- Supports bidirectional communications for remote upgrades
- Supports power export limiting and zero-export applications

Simple

- Easy system configuration using Enphase Installer App
- Flexible networking with Wi-Fi and Ethernet

Reliable

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





IQ Gateway Commercial 2

MODEL NUMBERS	UNITS	ENV2-IQC2-AM3-3P
IQ Gateway Commercial 2 ENV2-IQC2-AM3-3P	_	Three-phase communications gateway with integrated, revenue-grade PV production metering (±0.5%) and optional consumption monitoring (±2.5%). Includes three 400 A continuous rated Production CTs. This IQ Gateway Commercial 2 works only with the IQ8 Commercial Microinverters.
ACCESSORIES (ORDER SEPARATELY)		
Enphase Mobile Connect CELLMODEM-M1-06-SP-05 CELLMODEM-M1-06-AT-05	_	Plug-and-play industrial-grade cellular modem with a five-year data plan (expandable to 12 years). Available in the United States, Canada, Mexico, Puerto Rico, and the U.S. Virgin Islands, where there is adequate cellular service in the installation area.
Consumption monitoring CT-600-SPLIT (order three or six, as needed)	-	Split-core current transformers enable consumption metering
CAPACITY		
Number of microinverters polled	-	Up to 276
MECHANICAL AND ELECTRICAL DATA		
Power requirements	_	208 Y/120 VAC three-phase Max 20 A overcurrent protection is required
Typical power consumption	W	5
Rated frequency	Hz	60
Dimensions (W × H × D)	cm	21.3 × 12.6 × 4.5 (8.4" × 5" × 1.8")
Weight	oz	17.6 (498 g)
Ambient temperature range	°C	-40°C to 65°C (-40°F to 149°F) -40°C to 46°C (-40°F to 115°F) if installed in an enclosure
Environmental rating	_	IP30. For installation indoors or in an NRTL-certified, NEMA-type 3R enclosure.
Altitude	m	Up to 2,000 (6,560 ft)
Production CTs	_	 Capable of measuring 400 A of continuous current with 0.5% accuracy Accuracy of ±0.5% for revenue grade production metering (ANSI C12.20 certified) The internal aperture measures 43 mm and can support cables up to a maximum size of 1,000 KCMIL conductors UL2808 certified
Consumption CTs	_	 For electrical services up to 600 A, with parallel runs up to 1200 A Aperture of 50 mm × 50 mm and can support cables up to a maximum size of 300 KCMIL conductors Service entrance rated with UL2808 certification Rated for pollution degree 3 Accuracy of ±2.5% for consumption monitoring CT wire insulation rating of 600 V
COMMUNICATION INTERFACES		
Integrated Wi-Fi	_	802.11b/g/n (2.4 GHz, 5 GHz), for connecting the Enphase Cloud via the internet
Wi-Fi range (recommended)	ft	32.8
Ethernet	_	Optional, 802.3, Cat5E (or Cat 6) UTP Ethernet cable (not included) for connecting to the Enphase Cloud via the internet
Mobile Connect	-	CELLMODEM-M1-06-SP-05, CELLMODEM-M1-06-AT-05 (to be purchased separately)
Digital I/O	_	Digital input/output for grid operator control
USB 2.0	-	For Mobile Connect
Access point (AP) mode	_	For a connection between the IQ Gateway and a mobile device running the Enphase Installer App
Metering ports	-	Up to two Consumption CTs and one Production CT
Power line communication (PLC)	kHz	90-110 (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

POWER PRODUCTION/EXPORT LIMITING VIA THE IQ GATEWAY'S DIGITAL IO	UNITS	ENV2-IQC2-AM3-3P
Maximum relays read	-	4
Capabilities supported	-	Power production limiting (Production CTs required), power export limiting (Production CTs required and Consumption CTs – "Load with Solar" configuration)
Minimum IQ Gateway version	-	v7.3.120
Cable configurations	-	18 AWG, UL-Std.62, 600 V, 105°C, and min 0.03 inches average thickness
Signal voltage range	V	2.5-5 (digital high), 0-1.9 (digital low)
Terminal blocks	in ²	Five terminals, up to 0.002 in ²
Configuration via	-	Enphase Installer App, Enphase Installer Platform (site settings)
SCOPE OF DELIVERY		
Package dimensions (H × W × D)	in	6.3" ×10.8" × 3.9"
Package weight	lb	2.2
Aluminium DIN rail	cm	12.4 (4.9 in)
Current Transformers (CTs)	-	Three CT-400-SOLID included
COMPLIANCE		
Compliance	-	UL 916 CAN/CSA C22.2 No. 61010-1 47 CFR Part 15 Class B ICES 003 IEC/EN 61010-1:2010, EN50065-1, EN61000-4-5, EN61000-6-1, EN61000-6-2 ANSI C12.20 IEEE 1547:2018 - UL 1741-SB, 3 rd Ed.
COMPATABILITY		
Microinverter	-	IQ8H-3P and IQ8P-3P Series Microinverters





Revision history

REVISION	DATE	DESCRIPTION
DSH-00212-2.0	October 2023	Initial release.
DSH-00212-1.0	September 2023	Preliminary release.