

IQ Meter Collar

IQ Meter Collar is a meter socket adapter with an integrated microgrid interconnection device (MID) and energy meter. It is installed on an ANSI C12 Form 2S meter socket. IQ Meter Collar is rated for 200 A continuous current. It can be installed either at the service entrance between an ANSI C12 Form 2S utility meter and the meter socket or on the load side of the utility service on a separate meter socket pan.







Key specifications	MC-200-011-V01
Nominal grid supply	120/240 VAC/180°, split-phase
Nominal frequency	60 Hz
Overvoltage category	Category IV (service entrance-rated)
Integrated consumption meter	±0.5% accurate
Maximum continuous current rating	200 A
Maximum short-circuit current withstand	22 kA
Maximum overcurrent protection device	200 A
Weight	3.6 lb (1.63 kg)
Meter and meter socket interface	ANSI Form 2S, 200 A, ringless, or ring type

(\$) Easy to install

- · Lightweight and simple to install
- Lowers the cost of whole home backup
- Remote commissioning saves additional truck roll

Robust and reliable

- Thermal management minimizes use of internal fan
- Integrated AC-DC power supply closes MID to restore power to the home when the utility grid is available, even if battery energy is exhausted
- 15-year product warranty

Smart grid-ready

- Complies with advanced grid support, voltage, and frequency ride-through requirements
- Supports remote firmware updates to changing grid requirements
- Configurable at commissioning to comply with applicable grid interconnection parameters
- Meets CA Rule 21 (UL 1741-SA), IEEE 1547:2018 (UL 1741-SB), Puerto Rico Electric Power Authority (PREPA), and Hawaiian Electric Industries (HEI) SRD V2.0 grid profiles

Product details	IQ Meter Collar		
Order code	MC-200-011-V01		
What's in the box			
IQ Meter Collar	Meter collar adapter with microgrid interconnect device (MID)		
Seal ring	Seal ring to prevent tampering or unauthorized removal of the utility watt-hour meter		
Plastic bag	Plastic bag for installers to hang the IQ Meter Collar next to the utility watt-hour meter		
Quick install guide (QIG)	IQ Meter Collar quick install guide		
Accessories kit	One control connector; one junction box sub-assembly; two cable glands, 1/2" NPT (national pipe taper thread)		
Blank cover plate	One blank cover plate attached in front of the IQ Meter Collar		
Electrical specifications			
Nominal grid supply	120/240 VAC/180°, split-phase		
Nominal frequency	60 Hz		
Overvoltage category	Category IV (service entrance-rated)		
Integrated consumption meter	±0.5% accurate		
Maximum continuous current rating	200 A		
Maximum short-circuit current withstand ¹	22 kA		
Maximum overcurrent protection device	200 A		
Mechanical specifications			
Dimensions (L × W × D)	6.9 in × 8.1 in × 5.0 in (175 mm × 206 mm × 128 mm)		
Weight	3.6 lb (1.63 kg)		
Meter and meter socket interface	ANSI Form 2S, 200 A, ringless, or ring type		
Cooling	Forced convection-cooled		
Environmental specifications			
Ambient temperature range	-40°F to 122°F (-40°C to 50°C)		
Enclosure environmental rating	Indoor/Outdoor, NEMA type 3R		
Maximum altitude	8,200 ft. (2,500 m)		
Compliance			
Safety	UL 414		
Emissions	CFR 47 Part 15B		
System and grid compatibility			
Grid	UL 1741 SA/SB (IEEE 1547:2018), multi-mode		
Power control system (PCS)	Current sensor for a power control system under UL 3141		
Interfaces			
Control connector	4-wire signaling with 24 VDC power supply between system components		
Manual override lever	Manually sets MID relay state. Pull to open the MID relay, push to close the MID relay		

¹ The short-circuit current is limited by an external overcurrent protection device.

Interfaces				
	Short press (5–10 seconds): Disables the firmware control of MID, toggle again to enable firmware control of MID			
Push button	Long press (>15 seconds): Hard reset of the unit. The relay state does not change The relay LED and the control LED blink simultaneously for 6 seconds indicating a successful hard reset.			
	RELAY LED	CONTROL LED	STATE	
	RED	RED	MID closed	
	RED	Blinking (1 second ON, 1 second OFF)	MID locked closed, firmware control disabled	
	RED	OFF	Error	
	OFF	RED	MID open	
Light emitting diodes	OFF	Blinking (1 second ON, 1 second OFF)	MID locked open, firmware control disabled	
	Fast blinking (0.25 seconds ON, 0.25 seconds OFF)	Fast blinking (0.25 seconds ON, 0.25 seconds OFF)	Hard reset successful	
	OFF	OFF	No supply	
	OFF	Fast blinking (0.25 seconds ON, 0.25 seconds OFF)	MID open, error	
	OFF	Slow blinking (1 second ON, 3 seconds OFF)	MID open, grid present	
Accessories				
ACC-MC-200	One junction box assembly including two cable glands, one control connector, one plastic bag, one seal ring			
JC-MC-200	Jumper cover suitable for up to 200 A meter socket			
MP-MC-200		200 A ringless meter socke	t	
CTRL-SC3-NA-01	Control cable, 500 ft. spool, 18/4 TC-ER			
Warranty				
Limited warranty	15 years			
Enphase equipment compatibility				
IQ Gateway	ENV2-IQ-AM1-240, ENV-IQ-AM1-240			
Communications Kit		COMMS-KIT-02		
Microinverters	IQ8, IQ7, IQ6 Series Microinverters			
Enphase Energy System 3.0	IQ Battery 5P (IQBATTERY-5P-1P-NA), IQ Combiner 5/5C (X-IQ-AM1-240-5, X-IQ-AM1-5C), IQ System Controller 3M (SC200D111CMC1US01)			
Enphase Energy System 4.0	IQ Battery 10C (IQBATTERY-10C-1P-NA), IQ Battery 10CS (IQBATTERY-10CS-1P-NA), and IQ Combiner 6C (X-IQ-AM1-240-6C)			
Third-party inverters and legacy Enphase microinverters	Supported with fourth-generation Enphase Energy System			

System components



IQ System Controller 3M

² It connects the home to grid power, IQ Battery 5P, IQ Combiner 5/5C, and PV. In the event of a grid failure, it works seamlessly with the IQ Meter Collar to transition the system from grid power to backup power.



IQ Battery 5P

² Fully integrated 5 kWh AC Battery system. Includes six field-replaceable IQ8D-BAT Microinverters.



IQ Combiner 6C

³ Consolidates PV, battery, and EVSE interconnection into a single enclosure. Provides 60 A load control. Works seamlessly with IQ Meter Collar to transition the system from grid power to backup power in the event of a grid failure.



IQ Battery 10C/10CS

³ Fully integrated 10 kWh AC Battery system with neutral forming capability. Works with IQ Combiner 6C.

² Third-generation Enphase Energy System

³ Fourth-generation Enphase Energy System

Revision history

Revision	Date	Description
DSH-00468-2.0	February 2025	Updated the cover page and specifications.
DSH-00468-1.0	September 2024	Preliminary release.