

Q.HOME COMBINER

Q.HOME COMBINER 80 G1

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The Q.HOME SMART Residential Energy Solution Combiner Box



Flexible

- Network connectivity with Wi-Fi, Ethernet or Cellular



Consolidated

- Supports 64A input of Solar or Solar + Storage
- Supports up to 144 AC Modules (using external subpanel)



Robust

- NRTL-certified NEMA type 3R enclosure rated for outdoor installation



Streamlined

- Pre-installed revenue grade production meter
- 2 slim clamp CTs provided for consumption metering



Reliable

- 5-year warranty
- Automatic firmware updates



Complete

- Part of Qcells' complete Q.HOME SMART solution offering
- One brand. One warrantor.

■ Description

Q.HOME COMBINER 80 G1 consolidates up to 4 PV strings with a maximum of 44 AC Modules connected into a single enclosure. This enables a smooth interconnection across Q.HOME SMART products while ensuring easy and fast installations. Save time and costs by incorporating this user-friendly combiner box, optimally designed for residential applications.

■ Technical Specification

| GENERAL PRODUCT INFORMATION | | Q.HOME COMBINER 80 G1 |
|--|--------|---|
| Manufacturer | | Hanwha Solutions Corporation |
| Product Warranty | | 5 years |
| Country of Manufacture | | Vietnam |
| ACCESSORIES AND REPLACEMENT PARTS | | |
| Supported AC Modules (Microinverter included) | | Q.TRON BLK M-G2+/AC |
| Cellular Modem (LTE-MT-MODEM-CAT4-TN5) | | 4G based LTE-CAT4 (+5year data plan included) |
| Wi-Fi Dongle (WIFI-HQ-DG-USB) | | FCC Part 15 Subpart C/2412.0 to 2462.0 MHz ** |
| Circuit Breakers | | Supports Eaton BR210, BR215*, BR220, BR230, BR240, BR250, and BR260 circuit breakers |
| Consumption Monitoring CT (CT-JS-CLAMP-200A-5.2m) | | A pair of 200A clamp type current transformers (accuracy ±0.5%) ** |
| * pre-assembled / ** included in the package (Others are not included, need to be ordered separately) | | |
| ELECTRICAL SPECIFICATIONS | | |
| System Voltage | [V] | 120/240 VAC, 60Hz |
| Eaton BR Series Busbar Rating | [A] | 125 |
| Max. Continuous Current Rating (input from PV / storage) | [A] | 64 |
| Branch Circuits (Solar or Solar + Storage) | [pcs] | Up to four 2-pole Eaton BR series Distributed Generation (DG) breakers only (not included) |
| Max. Total Branch Circuit Breaker Rating (input) | [A] | 80 A of distributed generation /95 A with Gateway breaker included |
| Gateway Circuit Breaker | [A] | 15 A rating Eaton BR215 included |
| Consumption Monitoring | [A] | Metering with a pair of 200 A slim clamp current transformers (accuracy ±2.0%) |
| Production Metering | [A] | Metering with 200 A solid core current transformer, pre-wired to Gateway (accuracy ±0.5%) |
| MECHANICAL DATA | | |
| Max. AC Module Connection Q'ty | [pcs] | <ul style="list-style-type: none"> Up to 44 AC Modules in 1 combiner (11 in series × 4 strings) Up to 144 AC Modules using 1 combiner with external subpanel |
| Dimensions (W × H × D) | [inch] | 14.6 × 19.3 × 6.3 / height is 21.7 with mounting brackets (37.0 × 49.0 × 16.0 cm / height is 55.1 cm with mounting brackets) |
| Weights (without connection cables) | [lb] | 11.5 (5.2 kg) |
| Operating Temperature Range | [°F] | -40 to 140 (-40 to 60 °C) |
| Storage Temperature Range | [°F] | -40 to 140 (-40 to 60 °C) |
| Enclosure Environmental Rating | | Outdoor, NRTL-certified, NEMA type 3R |
| Wire Sizes | | <ul style="list-style-type: none"> 20 A breaker inputs: 12 to 8 AWG copper conductors Main lug combined output: 10 to 2/0 AWG copper conductors Neutral and ground: 8 to 6 copper conductors Always follow local code requirements for conductor sizing |
| Cooling | | Natural convection |
| Altitude | [ft] | Up to 6,561 (2,000 m) |
| INTERNET CONNECTION OPTIONS | | |
| Wi-Fi | | IEEE 802.11b/g/n |
| Cellular | | CELLMODEM-CAT4 (4G based LTE-CAT4) |
| Ethernet | | Optional, IEEE 802.3, CAT5E (or CAT6) STP Ethernet cable |
| COMPLIANCE | | |
| AC Combiner | | <ul style="list-style-type: none"> UL 1741, CSA C22.2 No.107 FCC Part 15.B ANSI C 12.20 accuracy class 0.5 (production meter) NEMA type 3R IEEE 2030.5 / CSIP Compliant |
| Monitoring Board | | UL 61010-1 / UL 61010-2-030 CSA 22.2 No. 61010-1-12 / CSA 22.2 No. 61010-2-030 |
| CT Sensor | | UL 2808 (XOBA) |

■ Qualifications and Certificates



■ Accessories

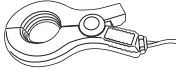
Parts Included in the Package



WIFI-HQ-DG-USB

Wi-Fi dongle with 2.4GHz bandwidth

FCC ID: OZ5C307-HW-WF



CT-JS-CLAMP-200A-5.2m

A slim clamp type consumption CT with $\pm 0.5\%$ accuracy (5.2 m, 20 AWG)

UL 2808(XOBA) E498920

Additional Parts (Not Included in the Package)

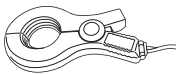


CT-HQ-SOLID-200A-2m

A solid core production CT with $\pm 0.1\%$ accuracy (2 m, 18 AWG)

- Required for >44 AC Module solution

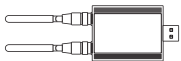
UL 2808(XOBA) E535456



CT-JS-CLAMP-200A-25m

A slim clamp type consumption CT with $\pm 0.5\%$ accuracy (25 m, 20 AWG)

UL 2808(XOBA) E498920



LTE-MT-MODEM-CAT4-TN5

Cellular modem with 5 year data plan included

UL 62368-1 E150299



LTE-TN-DP-5Y

5 year data plan extension



Qcells pursues minimizing paper output in consideration of the global environment.

Note: Installation instructions must be followed. Contact our technical service for further information on approved installation of this product.

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