Solar Simplified.

Qcells

Q.HOME COMBINER

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.

5 YEARS
Warranty
Product & Performance

Qcells

■ 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.XY+/AC, Q.PEAK DUO BLK ML-G10.XY+/AC *
Cellular Modem (CELLULAR-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%) ***

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* Q.TRON BLK M-G2.XY+/AC and Q.PEAK DUO BLK ML-G10.XY+/AC solar modules, where "X" can be any letter between A to W and "Y" can be any number between 1 to 9.
** pre-assembled / *** included in the package (Others are not included, need to be ordered separately)

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ELECTRICAL SPECIFICATIONS		
System Voltage	[V]	120/240 VAC, 60 Hz
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]	■ 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		■ 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 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 2.4 GHz bandwidth	
FCC ID: OZ5C307-HW-WF		

CT-JS-CLAMP-200A-5.2 m	A slim clamp type consumption CT with ±0.5 % accuracy (5.2 m, 20 AWG)	
UL 2808(XOBA) E498920		

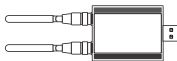### Additional Parts (Not Included in the Package)

CT-HQ-SOLID-200A-2 m — A solid core production CT with ±0.1 % accuracy (2 m, 18 AWG)
- Required for >44 AC Module solution

UL 2808(XOBA) E535456

CT-JS-CLAMP-200A-25 m — A slim clamp type consumption CT with ±0.5 % accuracy (25 m, 20 AWG)

UL 2808(XOBA) E498920

CELLULAR-MT-MODEM-CAT4-TN5 — Cellular modem with 5 year data plan included

UL 62368-1 E150299

CELLULAR-TN-DP-5Y — 5 year data plan extension

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