





Q.HOME COMBINER

Q.HOME COMBINER 80 G1

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Combiner Box of the Q.HOME SMART Residential Energy Solution

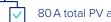


Flexible

Network connectivity with Wi-Fi, Ethernet or Cellular



Consolidated



80 A total PV and storage branch circuits



Robust

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



Streamlined

Pre-installed revenue grade production meter, with a pair of slim clamp CTs for consumption metering



Reliable

- 5-year warranty
- Automatic firmware updates



Complete

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

■ Description

The 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. Contact Qcells Customer Support if it is desired to install more than 44 AC Modules.

■ Technical Specification

GENERAL PRODUCT INFORMATION	Q.HOME COMBINER 80 G1
Manufacturer	Hanwha Solutions Corporation
Product Warranty	5 years
Country of Manufacturer	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)
WiFi 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 200 A clamp type current transformers (accuracy ±0.5%) **

* pre-assembled / ** included in the package (Others are not included, need to be ordered seperately)

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
Max. Fuse/Circuit Rating (output)	[A]	90
Branch Circuits (solar and/or 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 included
Consumption Monitoring	[A]	Metering with a pair of 200 A split core current transformers (accuracy ±2.0%)
Production Meterina	[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 (11 in series × 4 strings)
Dimensions (W \times H \times D)	[inch]	$14.6 \times 19.3 \times 6.3$ /height is 21.7 with mounting brackets (37.0 \times 49.0 \times 16.0 cm/height is 55.1cm 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, polycarbonate construction
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	[m]	Up to 2,000 (6,561 feet)

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) UTP Ethernet cable

COMPLIANCE	
	 UL 1741, CSA C22.2 No.107
	■ FCC Part 15.B
AC Combiner	 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	Solid core, Split core XOBA

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 $\pm 0.5\,\%$ accuracy (5.2 m, 20 AWG)

UL2808(XOBA) E498920

Additional parts (Not included in the package)



CT-HQ-SOLID-200A-2 m

A revenue grade solid core production CT with $\pm 0.1\%$ accuracy (2 m, 18 AWG) Calibration is required to support revenue grade metering.

UL2808(XOBA) E535456



CT-JS-CLAMP-200A-25 m

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

UL2808(XOBA) E498920



LTE-MT-MODEM-CAT4-TN5

Cellular modem with 5 year data plan of AT&T or T-mobile included

UL 62368-1 E150299



LTE-TN-DP-5Y

5 year data plan extension (for customers previously using cellular option)



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