





#### Q.HOME COMBINER

Q.HOME COMBINER 80 G1

# **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.

## **■** 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	
	0.770.41.74.41.00.41.0
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-CI AMP-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 separately)

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]	<ul> <li>Up to 44 AC Modules in 1 combiner (11 in series × 4 strings)</li> <li>Up to 144 AC Modules using 1 combiner with external subpanel</li> </ul>
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 55.1 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> <li>20 A breaker inputs: 12 to 8 AWG copper conductors</li> </ul>
		<ul> <li>Main lug combined output: 10 to 2/0 AWG copper conductors</li> </ul>
		<ul> <li>Neutral and ground: 8 to 6 copper conductors</li> </ul>
		<ul> <li>Always follow local code requirements for conductor sizing</li> </ul>
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> <li>UL 1741, CSA C22.2 No.107</li> </ul>
	■ FCC Part 15.B
	<ul> <li>ANSI C 12.20 accuracy class 0.5 (production meter)</li> </ul>
	■ 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  $\pm 0.5\,\%$  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  $\pm 0.1\%$  accuracy (2 m, 18 AWG)

Required for >44 AC Module solution

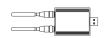
UL 2808(XOBA) E535456



CT-JS-CLAMP-200A-25 m

A slim clamp type consumption CT with  $\pm 0.5\,\%$  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





specifications subject to technical changes © **Qcells** Q.HOME\_COMBINER\_2024-10\_Rev01\_NA