

# Q.PEAK DUO BLK-G10+ 350-370

ENDURING HIGH PERFORMANCE



EUPD RESEARCH

EUROPE



**Q CELLS** 

Yield Security





GERMANY'S MOST POPULAR PROVIDER ife & Living Award 2021 1st Place Solar Technology

> DEUTSCHES INSTITUT FÜR SERVICE-QUALITÄT

### **BREAKING THE 20% EFFICIENCY BARRIER**

Warranty

Q.ANTUM DUO Z Technology with zero gap cell layout boosts module efficiency up to 20.9%.

### THE MOST THOROUGH TESTING PROGRAMME IN THE INDUSTRY

Q CELLS is the first solar module manufacturer to pass the most comprehensive quality programme in the industry: The new "Quality Controlled PV" of the independent certification institute TÜV Rheinland.



### INNOVATIVE ALL-WEATHER TECHNOLOGY

Optimal yields, whatever the weather with excellent low-light and temperature behaviour.



#### ENDURING HIGH PERFORMANCE

Long-term yield security with Anti LID Technology, Anti PID Technology<sup>1</sup>, Hot-Spot Protect and Traceable Quality Tra.Q™.



### **EXTREME WEATHER RATING**

High-tech aluminium alloy frame, certified for high snow (5400 Pa) and wind loads (4000 Pa).



# A RELIABLE INVESTMENT

Inclusive 25-year product warranty and 25-year linear performance warranty<sup>2</sup>.

<sup>1</sup> APT test conditions according to IEC / TS 62804-1:2015, method A (–1500 V, 96h) <sup>2</sup> See data sheet on rear for further information.

# THE IDEAL SOLUTION FOR:



Rooftop arrays on residential buildings



### **MECHANICAL SPECIFICATION**

Format	1717mm × 1045mm × 32mm (including frame)
Weight	19.9 kg
Front Cover	3.2 mm thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black anodised aluminium
Cell	6 × 20 monocrystalline Q.ANTUM solar half cells
Junction box	53-101 mm × 32-60 mm × 15-18 mm Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥1150 mm, (-) ≥1150 mm
Connector	Stäubli MC4; IP68



# **ELECTRICAL CHARACTERISTICS**

PO	WER CLASS			350	355	360	365	370
MIN	IIMUM PERFORMANCE AT STANDA	RD TEST CONDITIC	NS, STC <sup>1</sup> (PO	WER TOLERANCE	+5W/-0W)			
	Power at MPP <sup>1</sup>	P <sub>MPP</sub>	[W]	350	355	360	365	370
_	Short Circuit Current <sup>1</sup>	I <sub>sc</sub>	[A]	10.97	11.00	11.04	11.07	11.10
nun	Open Circuit Voltage <sup>1</sup>	V <sub>oc</sub>	[V]	41.11	41.14	41.18	41.21	41.24
Minir	Current at MPP	IMPP	[A]	10.37	10.43	10.49	10.56	10.62
2	Voltage at MPP	V <sub>MPP</sub>	[V]	33.76	34.03	34.31	34.58	34.84
	Efficiency <sup>1</sup>	η	[%]	≥19.5	≥19.8	≥20.1	≥20.3	≥20.6
MIN	IIMUM PERFORMANCE AT NORMAI	OPERATING CONI	DITIONS, NM	OT <sup>2</sup>				
	Power at MPP	P <sub>MPP</sub>	[W]	262.6	266.3	270.1	273.8	277.6
E	Short Circuit Current	I <sub>sc</sub>	[A]	8.84	8.87	8.89	8.92	8.95
nim	Open Circuit Voltage	V <sub>oc</sub>	[V]	38.77	38.80	38.83	38.86	38.90
Σi	Current at MPP	IMPP	[A]	8.14	8.20	8.26	8.31	8.37
	Voltage at MPP	V <sub>MPP</sub>	[V]	32.24	32.48	32.71	32.94	33.17

 $^{1}$ Measurement tolerances P<sub>MPP</sub> ±3%; I<sub>SC</sub>; V<sub>oc</sub> ±5% at STC: 1000 W/m<sup>2</sup>, 25±2°C, AM 1.5 according to IEC 60904-3  $^{\circ}$  2800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5 according to IEC 60904-3  $^{\circ}$  2800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5 according to IEC 60904-3  $^{\circ}$  2800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5 according to IEC 60904-3  $^{\circ}$  2800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5 according to IEC 60904-3  $^{\circ}$  2800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5 according to IEC 60904-3  $^{\circ}$  2800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5 according to IEC 60904-3  $^{\circ}$  2800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5 according to IEC 60904-3  $^{\circ}$  2800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5 according to IEC 60904-3  $^{\circ}$  2800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5 according to IEC 60904-3  $^{\circ}$  2800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5 according to IEC 60904-3  $^{\circ}$  2800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5 according to IEC 60904-3  $^{\circ}$  2800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5 according to IEC 60904-3  $^{\circ}$  2800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5 according to IEC 60904-3  $^{\circ}$  2800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5 according to IEC 60904-3  $^{\circ}$  2800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5 according to IEC 60904-3  $^{\circ}$  2800 W/m<sup>2</sup>, NMOT, spectrum AM 1.5 according to IEC 60904-3  $^{\circ}$  2800 W/m<sup>2</sup>, 28

### Q CELLS PERFORMANCE WARRANTY



At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organisation of your respective country.



Typical module performance under low irradiance conditions in comparison to STC conditions (25  $^{\circ}\text{C},$  1000 W/m²).

#### TEMPERATURE COEFFICIENTS

Temperature Coefficient of I <sub>sc</sub>	α	[%/K]	+0.04	Temperature Coefficient of Voc	β	[%/K]	-0.27
Temperature Coefficient of P <sub>MPP</sub>	Ŷ	[%/K]	-0.34	Nominal Module Operating Temperature	NMOT	[°C]	43±3

PROPERT	<b>SVSTEM</b>	DESIGN

Maximum System Voltage	V <sub>SYS</sub>	[V]	1000	PV module classification	Class II
Maximum Reverse Current	I <sub>R</sub>	[A]	20	Fire Rating based on ANSI/UL 61730	C/TYPE 2
Max. Design Load, Push / Pull		[Pa]	3600/2660	Permitted Module Temperature	-40°C - +85°C
Max. Test Load, Push/Pull		[Pa]	5400/4000	on Continuous Duty	

# **QUALIFICATIONS AND CERTIFICATES**

Quality Controlled PV - TÜV Rheinland; IEC 61215:2016; IEC 61730:2016. This data sheet complies with DIN EN 50380. QCPV Certification ongoing.



Note: Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

#### Hanwha Q CELLS GmbH

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# 



# **IQ8** Series Microinverters

Our newest IQ8 Microinverters are the industry's first microgrid-forming, softwaredefined microinverters with split-phase power conversion capability to convert DC power to AC power efficiently. The brain of the semiconductor-based microinverter is our proprietary application-specific integrated circuit (ASIC) which enables the microinverter to operate in grid-tied or off-grid modes. This chip is built in advanced 55nm technology with high speed digital logic and has super-fast response times to changing loads and grid events, alleviating constraints on battery sizing for home energy systems.



Part of the Enphase Energy System, IQ8 Series Microinverters integrate with the Enphase IQ Battery, Enphase IQ Gateway, and the Enphase App monitoring and analysis software.







IQ8 Series Microinverters redefine reliability standards with more than one million cumulative hours of power-on testing, enabling an industryleading limited warranty of up to 25 years.



IQ8 Series Microinverters are UL Listed as PV Rapid Shut Down Equipment and conform with various regulations, when installed according to manufacturer's instructions.

Easy to install

- Lightweight and compact with plug-n-play connectors
- Power Line Communication (PLC) between components
- Faster installation with simple two-wire cabling

### High productivity and reliability

- Produce power even when the grid is down\*
- More than one million cumulative hours of testing
- Class II double-insulated
   enclosure
- Optimized for the latest highpowered PV modules

### **Microgrid-forming**

- Complies with the latest advanced grid support\*\*
- Remote automatic updates for the latest grid requirements
- Configurable to support a wide range of grid profiles
- Meets CA Rule 21 (UL 1741-SA)
   requirements

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\* Only when installed with IQ System Controller 2, meets UL 1741. IQ8H-208V operates only in grid-tied mode.

\*\* IQ8 Series Microinverters supports split phase, 240V. IQ8H-208 supports split phase, 208V only.

# **IQ8** Series Microinverters

Commonly used module pairings <sup>2</sup> Module compatibility	w						
Module compatibility		235 - 350	235 - 440	260 - 460	295 - 500	320 - 540+	295 - 500+
		60-cell/120 half-cell	e	60-cell/120 half-cell, 6	6-cell/132 half-cell a	nd 72-cell/144 half-ce	
MPPT voltage range	v	27 - 37	29 - 45	33 - 45	36 - 45	38 - 45	38 - 45
Operating range	v	25 - 48			25 - 58		
Min/max start voltage	v	30 / 48			30 / 58		
Max input DC voltage	v	50			60		
Max DC current <sup>3</sup> [module lsc]	А			15	i		
Overvoltage class DC port				II			
DC port backfeed current	mA			0			
PV array configuration		1x1 Ungrounded a	array; No additional D	C side protection requi	red; AC side protecti	on requires max 20A p	er branch circuit
OUTPUT DATA (AC)		1Q8-60-2-US	IQ8PLUS-72-2-US	108M-72-2-US	108A-72-2-US	IQ8H-240-72-2-US	IQ8H-208-72-2-US
Peak output power	VA	245	300	330	366	384	366
Max continuous output power	VA	240	290	325	349	380	360
Nominal (L-L) voltage/range <sup>4</sup>	V			240 / 211 - 264			208 / 183 - 250
Max continuous output current	А	1.0	1.21	1.35	1.45	1.58	1.73
Nominal frequency	Hz			60	D		
Extended frequency range	Hz			50 -	68		
AC short circuit fault current over 3 cycles	Arms			2			4.4
Max units per 20 A (L-L) branch circuit⁵		16	13	11	11	10	9
Total harmonic distortion				<5	%		
Overvoltage class AC port				II	I		
AC port backfeed current	mA			30	)		
Power factor setting				1.0	)		
Grid-tied power factor (adjustable)				0.85 leading -	0.85 lagging		
Peak efficiency	%	97.5	97.6	97.6	97.6	97.6	97.4
CEC weighted efficiency	%	97	97	97	97.5	97	97
Night-time power consumption	mW			60	0		
MECHANICAL DATA							
Ambient temperature range				-40°C to +60°C (	-40°F to +140°F)		
Relative humidity range				4% to 100% (	condensing)		
DC Connector type				МС	24		
Dimensions (HxWxD)			:	212 mm (8.3") x 175 mm	(6.9") x 30.2 mm (1.2	.")	
Weight				1.08 kg (2	2.38 lbs)		
Cooling				Natural convec	tion – no fans		
Approved for wet locations				Ye	S		
Pollution degree				PD	3		
Enclosure			Class II do	uble-insulated, corrosi	on resistant polymeri	ic enclosure	
Environ. category / UV exposure rating				NEMA Type	3 / outdoor		
COMPLIANCE							
		CA Rule 21 (UL 1741-5	SA), UL 62109-1, UL174	41/IEEE1547, FCC Part 1	5 Class B, ICES-000	3 Class B, CAN/CSA-0	C22.2 NO. 107.1-01
Certifications			)18 Rule 64-218 Rapid	t Down Equipment and Shutdown of PV Syster			

(1) The IQ8H-208 variant will be operating in grid-tied mode only at 208V AC. (2) No enforced DC/AC ratio. See the compatibility calculator at https://link.enphase.com/module-compatibility (3) Maximum continuous input DC current is 10.6A (4) Nominal voltage range can be extended beyond nominal if required by the utility. (5) Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.

 4		3	$\overline{\nabla}$	2			1		
						REVISION	IS		
					REV	DESCRIPTION INITIAL RELEASE			DATE
					B	ADD B15019-001			10/10/20
		5		LOAD DIRECT UPLIFT LATERAL.PERI	P. TO SLOT ALLEL TO SLOT IN 7/16" OSB ON P. TO SLOT	FOS=2         FOS=3           345         230           140         95           265         175           FOS=2         FOS=3           190         125           125         85			
	3			NOTES * Factor of Sa * Torque at 3/ * All loads in p * Values valid * Values valid installation i * The kit as sh	8" T-Bolt = 15ft.lb oounds force only for conditons only when produce nstruction and oth	135 90 s (20 N.m) s equal or better thar et is used in accorda er technical docume For alternative config	nce with Sun Intation	Modo	
		Go.	2	SunModo 4 1/4" Deck	Screws in Min 7/1	6" OSB			
	1		2 8 B		01 SEALII	6" OSB NG WASHER .26 ID X .5 AP SCREW 3/8-16 X 3/4			4
			2 8 B	4 1/4" Deck B 8 B15019-0	01 SEALII 01 HEX C	NG WASHER .26 ID X .5	1		1
			2 8 8 7	4 1/4" Deck B 8 B15019-0 7 B15018-0	01 SEALII 01 HEX C 01 GASKE	NG WASHER .26 ID X .5 AP SCREW 3/8-16 X 3/4	1		1
			2 8 B	A 1/4" Deck B 8 B15019-0 7 B15018-0 6 C50001-0	01 SEALII 01 HEX C 01 GASKE 01 FLANC	NG WASHER .26 ID X .5 AP SCREW 3/8-16 X 3/4 ET, EPDM, WITH ADHES	1		1 2 2
			2 8 B	<ul> <li>4 1/4" Deck</li> <li>B 8 B15019-0</li> <li>7 B15018-0</li> <li>6 C50001-0</li> <li>5 B15003-0</li> </ul>	01 SEALII 01 HEX C 01 GASKE 01 FLANC 02 T-BOL	NG WASHER .26 ID X .5 AP SCREW 3/8-16 X 3/4 ET, EPDM, WITH ADHES E NUT 3/8-16 T 3/8-16X1.0", 304 SS	1		1 2
			2 8 B	<ul> <li>4 1/4" Deck</li> <li>8 815019-0</li> <li>7 815018-0</li> <li>6 C50001-0</li> <li>5 815003-0</li> <li>4 820007-0</li> </ul>	01 SEALII 01 HEX C 01 GASKE 01 FLANC 02 T-BOL 01 L FOO	NG WASHER .26 ID X .5 AP SCREW 3/8-16 X 3/4 ET, EPDM, WITH ADHES E NUT 3/8-16 T 3/8-16X1.0", 304 SS	4 SIVE		1 2 2 1 1
			2 8 B	B         8         B15019-0           7         B15018-0           6         C50001-0           5         B15003-0           4         B20007-0           3         A20062-0	01 SEALII 01 HEX C 01 GASKE 01 FLANC 02 T-BOL 01 L FOO 01 HEX W	NG WASHER .26 ID X .5 AP SCREW 3/8-16 X 3/4 ET, EPDM, WITH ADHES E NUT 3/8-16 T 3/8-16X1.0", 304 SS T	4 SIVE		1 2 2 1
			2 8 B	B         8         B15019-0           7         B15018-0           6         C50001-0           5         B15003-0           4         B20007-0           3         A20062-0           2         B15039-0           1         A50224-0	01 SEALII 01 HEX C 01 GASKE 01 FLANC 02 T-BOL 01 L FOO 01 HEX W 01 METAL	NG WASHER .26 ID X .5 AP SCREW 3/8-16 X 3/4 ET, EPDM, WITH ADHES E NUT 3/8-16 T 3/8-16X1.0", 304 SS T ASHER HEAD LAG BO ROOF DECK MOUNT	4 SIVE LT 1/4X3		1 2 2 1 1 4 1
	1		2 8 8	B         8         B15019-0           7         B15018-0           6         C50001-0           5         B15003-0           4         B20007-0           3         A20062-0           2         B15039-0           1         A50224-0           ITEM         PART           MATERIAL         SEE NOT           Third Angle Projection:         GENERAL SPECIFICATIONS	01 SEALII 01 HEX C 01 GASKI 01 FLANG 02 T-BOL' 01 L FOO 01 HEX W 01 METAI NUMBER ES €S	NG WASHER .26 ID X .5 AP SCREW 3/8-16 X 3/4 ET, EPDM, WITH ADHES E NUT 3/8-16 T 3/8-16X1.0", 304 SS T ASHER HEAD LAG BOI ROOF DECK MOUNT DESCRIP SunMod	4 SIVE LT 1/4X3 TION <b>do Corp</b>		1 2 1 1 4 1 QT
			2 8 B	B         B         B15019-0           7         B15018-0           6         C50001-0           5         B15003-0           4         B20007-0           3         A20062-0           2         B15039-0           1         A50224-0           ITEM         PART           MATERIAL         SEE NOT           Third Angle Projection:         GENERAL SPECIFICATIONS           CENERAL SPECIFICATIONS         MATERIAL           XXX 40.02 [0.50mm]         XXX 40.02 [0.50mm]           XXX 40.02 [0.50mm]         XXX 40.02 [0.50mm]           XXX 40.02 [0.50mm]         XX 40.02 [0.50mm]           XX x 40.02 [0.50mm]         XX x 40.02 [0.50mm]           XX x 40.02 [0.50mm]         XX x 40.02 [0.50mm]	01 SEALII 01 HEX C 01 GASKE 01 FLANC 02 T-BOL 01 L FOO 01 HEX W 01 METAL NUMBER ES ●	NG WASHER .26 ID X .5 AP SCREW 3/8-16 X 3/4 ET, EPDM, WITH ADHES IE NUT 3/8-16 T 3/8-16X1.0", 304 SS T ASHER HEAD LAG BO ROOF DECK MOUNT DESCRIP <b>SUNMOC</b> 4800 NE 65TH STREET METAL ROOF DI	4 SIVE LT 1/4X3 TION <b>JO COrp</b> , VANCOUVER	WA 98682	1 2 1 1 4 1 QT
			2 8 8	B         8         B15019-0           7         B15018-0           6         C50001-0           5         B15003-0           4         B20007-0           3         A20062-0           2         B15039-0           1         A50224-0           ITEM         PART           MATERIAL         SEE NOT           Third Angle Projection:         GENERAL SPECIFICATIONS AID Dimagons in Inches Im           COVENTIAL OF Semple         Semmell	01 SEALII 01 HEX C 01 GASKI 01 FLANG 02 T-BOL 01 L FOO 01 HEX W 01 METAL NUMBER ES ES Immeters] 1.	NG WASHER .26 ID X .5 AP SCREW 3/8-16 X 3/4 T, EPDM, WITH ADHES E NUT 3/8-16 T 3/8-16X1.0", 304 SS T ASHER HEAD LAG BO ROOF DECK MOUNT DESCRIP SunMoc 4800 NE 65TH STREET METAL ROOF DI IDRAWING NUMBER	4 SIVE LT 1/4X3 TION <b>JO CORP</b> , VANCOUVER ECK MOUNT	WA 98682 KIT	1 2 1 1 4 1 QT
		TIS DRAWAGE B	2 8 B	B       8       B15019-0         7       B15018-0         6       C50001-0         5       B15003-0         4       B20007-0         3       A20062-0         2       B15039-0         1       A50224-0         ITEM       PART         Material       SEE NOT         Third Angle Projection:       GENERAL SPECIFICATIONS         GENERAL SPECIFICATIONS       ALDIMORSIONE INCOMENT         XXX 40.03 (10.55mm)       XXX 40.02 (0.50mm)         XXX 40.02 (0.50mm)       C         DRAWN BY       LWFF         CHECKED BY       ADDITIS CONTENTS MAY	01 SEALII 01 HEX C 01 GASKE 01 FLANC 02 T-BOL <sup>2</sup> 01 L FOO 01 L FOO 01 HEX W 01 METAL NUMBER ES ● 1 1. Track all sharp edges 10:062018 TTTLE TTTLE TTTLE	NG WASHER .26 ID X .5 AP SCREW 3/8-16 X 3/4 T, EPDM, WITH ADHES E NUT 3/8-16 T 3/8-16X1.0", 304 SS T ASHER HEAD LAG BO ROOF DECK MOUNT DESCRIP <b>SUNMOC</b> 4800 NE 65TH STREET METAL ROOF DI DRAWING NUMBER K50532-(	4 SIVE LT 1/4X3 TION <b>JO COrp</b> , VANCOUVER	WA 98682 KIT URE	1 2 1 1 4 1 QTV



# EZ Grip Metal Mount Kit (K50532-001 & K50532-002):

These Installation Instructions are for attaching the EZ Grip Metal Mount Kit into 1/2" plywood, 7/16" OSB or 26ga sheet metal roof decking material. The SunModo EZ Grip Metal Mount Kit comes complete with Mount,  $1/4 \times 3"$  or  $1/4 \times 1-1/2"$  Hex Washer Head Lag Bolts, L-Foot and 3/8" Hardware.



Locate desired location for the EZ Grip Metal Mount. Install using the four  $1/4 \times 3''$  or  $1/4 \times 1 \cdot 1/2''$  Hex Washer Head Lag Bolts supplied.



Secure the L-Foot to the Mount using the 3/8" Hardware supplied. Torque to 15 ft. lbs.



Using the 3/8" hardware supplied attach the Rail to the L-Foot. Torque to 15 ft. lbs.

# **Installation Notes:**

- 1. Tools Required: Drill, torque wrench, sockets set, tape measure, string line or laser line.
- 2. The use of an impact driver is strongly discouraged for all stainless nut and bolt hardware.
- 3. Installer shall use anti-seize compound, such as Permatex anti-seize. Lubricant is recommended for all stainless steel threaded parts.

# SUNMOD Ridge Bridge Mount for Rolled Metal Roofs

# **3 Bracket Sizes 2 Gasket Types**

Fits 90% of All Rolled **Metal Roof Profiles!** 

# The Next Generation in Metal Roof Mounts!



1905 E 5th St., Ste, A

Phone: 360-844-0048 www.sunmodo.com





K10211-XXX (shown with corrugated roof gasket)

Designed for maximum flexibility; 3 bracket sizes fit almost any rolled metal roof profile.

Single screw penetration mount on wood or metal purlins for fast and easy installation.

Choice of 2 EPDM gaskets for a superior water tight seal.

The vertical slot feature provides adjustment to the solar array when roofing is uneven.

Durable aluminum anodizing finish for increased weather corrosion resistance.



K10212-XXX (shown with barn roof gasket)

Combine with L-Adaptor (K10066-016) to change the orientation of rail at right angles to corrugations



# All kits come complete with the following parts:



1 - Roof Mount Gasket (Choice of 2 Types)







1905 E 5th St., Ste. A Vancouver, WA 98661

Phone: 360-844-0048 www.sunmodo.com



# Make your next metal roof attachment without the daunting task of locating the

**truss.** SunModo's EZ Grip Metal Deck Mount installs into 26 gauge sheet metal, 1/2 plywood or 7/16 OSB roof decking material.

**SunModo's EZ Grip Metal Deck Mount** installs in just minutes into sheet metal, plywood or OSB roof decking. The four

# **EZ GRIP METAL DECK MOUNT**



included 1/4 x 3" Hex Washer Head Self-tapping Screws have the length to penetrate though 1-1/2 inches of insulation while still piercing completely through the roof decking. And since the four screws are guided by the aluminum extruded base to penetrate at a 30-degree angle, the Metal Roof Deck Mount Kit offers superior attachment performance. 1/4-20 Self-drilling screws can be used for attachments into 26 gauge minimum thickness metal roofs.

**The EZ Grip Metal Deck Mount** is designed to fit on the most popular R-Panel and U-Panel trapezoidal types of metal roofs. The aluminum extruded base easily clears roof profiles 7/16" tall by 1-1/2" wide. The EPDM gaskets on the washers and on the aluminum extruded base combine to provide a water tight seal at the roof penetration site.



# **Features and Benefits**

- Attaches into 1/2 plywood or 7/16 OSB roof decking material using four 1/4 x 3" Hex Washer Head Self-tapping Screws
- Attaches into 26 gauge minimum thickness sheet metal using four 1/4 x 2" Hex Washer Head Self-drilling Screws
- Angled penetrations provide superior attachment performance
- A wide variety of L-feet and attachment options are available
- Passed the High-Velocity Hurricane Zone (HVHZ) –TAS 100(a) Wind-Driven Rain Test

# Enphase IQ Combiner 3

(X-IQ-AM1-240-3)

The Enphase IQ Combiner 3<sup>™</sup> with Enphase IQ Envoy<sup>™</sup> consolidates interconnection equipment into a single enclosure and streamlines PV and storage installations by providing a consistent, pre-wired solution for residential applications. It offers up to four 2-pole input circuits and Eaton BR series busbar assembly.



# Smart

- Includes IQ Envoy for communication
   and control
- Flexible networking supports Wi-Fi, Ethernet, or cellular
- Optional AC receptacle available for PLC bridge
- Provides production metering and optional consumption monitoring

# Simple

- · Reduced size from previous combiner
- Centered mounting brackets support single stud mounting
- Supports back and side conduit entry
- Up to four 2-pole branch circuits for 240 VAC plug-in breakers (not included)
- 80 A total PV or storage branch circuits

# Reliable

- Durable NRTL-certified NEMA type 3R enclosure
- Five-year warranty
- UL listed



# Enphase IQ Combiner 3

# MODEL NUMBER

IQ Combiner 3 X-IQ-AM1-240-3	IQ Combiner 3 with Enphase IQ Envoy <sup>™</sup> printed circuit board for integrated revenue grade PV production metering (ANSI C12.20 +/- 0.5%) and optional* consumption monitoring (+/- 2.5%).
ACCESSORIES and REPLACEMENT PARTS (no	ot included, order separately)
Enphase Mobile Connect™ CELLMODEM-03 (4G / 12-year data plan) CELLMODEM-01 (3G / 5-year data plan) CELLMODEM-M1 (4G based LTE-M / 5-year data plan)	Plug and play industrial grade cellular modem with data plan for systems up to 60 microinverters. (Available in the US, Canada, Mexico, Puerto Rico, and the US Virgin Islands, where there is adequate cellular service in the installation area.)
Consumption Monitoring* CT CT-200-SPLIT	Split core current transformers enable whole home consumption metering (+/- 2.5%).
Circuit Breakers BRK-10A-2-240 BRK-15A-2-240 BRK-20A-2P-240	Supports Eaton BR210, BR215, BR220, BR230, BR240, BR250, and BR260 circuit breakers. Circuit breaker, 2 pole, 10A, Eaton BR210 Circuit breaker, 2 pole, 15A, Eaton BR215 Circuit breaker, 2 pole, 20A, Eaton BR220
EPLC-01	Power line carrier (communication bridge pair), quantity 2
XA-PLUG-120-3	Accessory receptacle for Power Line Carrier in IQ Combiner 3 (required for EPLC-01)
XA-ENV-PCBA-3	Replacement IQ Envoy printed circuit board (PCB) for Combiner 3
ELECTRICAL SPECIFICATIONS	
Rating	Continuous duty
System voltage	120/240 VAC, 60 Hz
Eaton BR series busbar rating	125 A
Max. continuous current rating (output to grid)	65 A
Max. fuse/circuit rating (output)	90 A
Branch circuits (solar and/or storage)	Up to four 2-pole Eaton BR series Distributed Generation (DG) breakers only (not included)
Max. continuous current rating (input from PV)	64 A
Max. total branch circuit breaker rating (input)	80A of distributed generation / 90A with IQ Envoy breaker included
Production Metering CT	200 A solid core pre-installed and wired to IQ Envoy
MECHANICAL DATA	
Dimensions (WxHxD)	49.5 x 37.5 x 16.8 cm (19.5" x 14.75" x 6.63"). Height is 21.06" (53.5 cm with mounting brackets)
Weight	7.5 kg (16.5 lbs)
Ambient temperature range	-40° C to +46° C (-40° to 115° F)
Cooling	Natural convection, plus heat shield
Enclosure environmental rating	Outdoor, NRTL-certified, NEMA type 3R, polycarbonate construction
Wire sizes	<ul> <li>20 A to 50 A breaker inputs: 14 to 4 AWG copper conductors</li> <li>60 A breaker branch input: 4 to 1/0 AWG copper conductors</li> <li>Main lug combined output: 10 to 2/0 AWG copper conductors</li> <li>Neutral and ground: 14 to 1/0 copper conductors</li> <li>Always follow local code requirements for conductor sizing.</li> </ul>
Altitude	To 2000 meters (6,560 feet)
INTERNET CONNECTION OPTIONS	
Integrated Wi-Fi	802.11b/g/n
Ethernet	Optional, 802.3, Cat5E (or Cat 6) UTP Ethernet cable (not included)
Cellular	Optional, CELLMODEM-01 (3G) or CELLMODEM-03 (4G) or CELLMODEM-M1 (4G based LTE-M) (not included)
COMPLIANCE	
Compliance, Combiner	UL 1741 CAN/CSA C22.2 No. 107.1 47 CFR, Part 15, Class B, ICES 003 Production metering: ANSI C12.20 accuracy class 0.5 (PV production)
Compliance, IQ Envoy	UL 60601-1/CANCSA 22.2 No. 61010-1
Cellular COMPLIANCE Compliance, Combiner	Optional, CELLMODEM-01 (3G) or CELLMODEM-03 (4G) or CELLMODEM-M1 (4G based LT (not included) UL 1741 CAN/CSA C22.2 No. 107.1 47 CFR, Part 15, Class B, ICES 003 Production metering: ANSI C12.20 accuracy class 0.5 (PV production) UL 60601-1/CANCSA 22.2 No. 61010-1

\* Consumption monitoring is required for Enphase Storage Systems.

# To learn more about Enphase offerings, visit enphase.com

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D/N	PART # TABLE			
P/N	DESCRIPTION			
CCLAMPM1	NXT HORIZON COMBO CLAMP - MI			
CCLAMPD1	NXT HORIZON COMBO CLAMP - DA	IRK	$\sim$	
	606997 SN Э ЭФД ЭЧЯІМП			
30MM TO 40M MODULE FRAM				
<b>UNI</b> 1411 BROADWAY BUQUERQUE, NM	BLVD. NE 87102 USA DESCRIPTION:	NXT HORIZON PART & ASSEMBLY COMBO CLAMP	DRAWING NOT TO SCALE ALL DIMENSIONS ARE NOMINAL PRODUCT PROTECTED BY	NH-A03
PHONE: 505.24	2.6411	9/30/2021	ONE OR MORE US PATENTS	
WWW.UNIRA	JUNI JUNI DATE.	5/ 50/ 2021	LEGAL NOTICE	SHEET













	PART # TABLE	
P/N	DESCRIPTION	LENGTH
084RLM1	NXT HORIZON RAIL 84" MILL	84"
084RLD1	NXT HORIZON RAIL 84" DARK	84"
168RLM1	NXT HORIZON RAIL 168" MILL	168"
168RLD1	NXT HORIZON RAIL 168" DARK	168"
208RLM1	NXT HORIZON RAIL 208" MILL	208"
208RLD1	NXT HORIZON RAIL 208" DARK	208"
246RLM1	NXT HORIZON RAIL 246" MILL	246"
246RLD1	NXT HORIZON RAIL 246" DARK	246"





