1.0 Reference and Address			
Report Number	102066127MPK-003	Original Issued: 30-Jun-2015	Revised: 27-Feb-2018
Standard(s)	Mounting Systems, Mounting Devices, Clamping/Retention Devices, and Ground Lugs for Use with Flat-Plate Photovoltaic Modules and Panels [UL 2703:2015 Ed.1]		

Applicant	Quick Mount PV	Manufacturer 1	**Wencon Development, Inc.**
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Legal Name	Wencon Development, Inc.		

2.0 Product Description

Product	Accessory Frame Bracket installed using QMAFBU Installation Instructions, Feb-2018, Rev 2
Brand name	Accessory Frame Bracket
Description	The product covered by this report is the "Accessory Frame Bracket" from Quick Mount PV. The Accessory Frame Bracket is used to mount module level electronics to standard PV module frames. The Accessory Frame Bracket provides a mounting option for the module level electronic to the module frame for Quick Mount PV's Quick Rack rail-free solar mounting system, as well as other rail-less racking systems, ground-mounted and ballasted systems. The Accessory Frame Bracket is used to mount and bond a module level electronic to a PV module that complies with UL 1703 when used with a module level electronic and PV module that has been evaluated for grounding and/ or mounting in compliance with the instructions provided. Accessory Frame Bracket Assembly bonds the module level electronic with bonding pins that pierce the module frame and module level electronics case when the bracket attachment bolts are torqued to 13 ft-lbs using the provided serrated flange bolt. The Accessory Frame Bracket assembly is made from 5000 series aluminum, including 18-8 stainless steel hardware with 316 stainless steel bonding pins. The module frame must be grounded by a UL2703 racking system, e.g. Quick Rack rail free racking system from Quick Mount PV. The system is to be installed in accordance with the latest National Electrical Code, ANSI/NFPA 70, including NEC 250: Grounding and Bonding, and NEC 690: Solar Photovoltaic Systems. Any local electrical codes must be adhered in addition to the national electrical codes. System maximum series fuse rating shall not exceed 20 Amps. The Accessory Frame Bracket have only been tested for bonding only and no mechanical load was performed.
Models	QMAFB Accessory Frame Bracket and QMAFBU Accessory Frame Bracket.
Model Similarity	QMAFB and QMAFBU are very similar in construction, the only difference is that the QMAFBU uses a Universal Accessory Frame Clamp (part number 3225).

2.0 Product Description	
Ratings	Maximum Series Fuse Rating: 20A Torque for Accessory Frame Bracket: 15 ft-lbs *See section 7.0 illustration # 1 for a complete list of PV modules and module level power electronics evaluated with these racking systems*
Conditions of Acceptability	The product covered in this report is not a complete UL 2703 listed racking system. The Accessory Frame Brackets is intended for use with a UL 2703 listed racking system. Consideration should be given to the following when the component is used in or with another
	(Typical Conditions of Acceptability to be considered for recognized component products follow:)
	1. Complete racking system must be grounded and bonded to the required UL 2703. 2. Module frame section meet requirements outlined in illustration No. 2. 3. Installed with evaluated PV module and module level electronic outlined in ratings above. 4. The module frame must be grounded using a UL 2703 listed racking system, e.g. the Quick Rack rail free racking system from Quick Mount PV. The system is to be installed in accordance with the latest National Electrical Code, ANSI/NFPA 70, including NEC 250: Grounding and Bonding, and NEC 690: Solar Photovoltaic Systems. Any local electrical codes must be adhered in addition to the national electrical codes. 5. System maximum series fuse rating shall not exceed 20 Amps.

7.0 Illustrations

Illustration 1- List of PV modules and Module Level Power Electronics evaluated with these racking systems

Module Level Power Electronics Tested with QMAFB or QMAFBU Accessory Frame Bracket	
Manufacturer	Part No
SolarEdge	P300, P320, P400, P405, P600, P700

PV Modules frames tested for bonding only	
Module manufacturer	Model Tested
Suniva Optimus	OPT 60
Module Level Power Electronics Evaluated with QMAFB or QMAFBU Accessory Frame Bracket	
Manufacturer	Part No
SolarEdge	P370, P730, P800s, P800p
PV Modules added based on evaluation for bonding only (List of evaluated and approved modules and module level electronics for use with Accessory Frame Bracket)	
Module manufacturer	Model numbers
Note: Module wattage is represented by XXX in product codes	
BenQ Green Triplex	PM060M02-XXX, PM060P00-XXX, PM245P00-XXX, PM250M01-XXX, PM245P03-XXX, PM060M02-Plus-XXX
ET Solar	ET-P660BB, ET-P660WB, ET-P660WW, ET-M660BB, ET-M660WW, ET-M672WW, ET-M672BB, ETP672BB, Anti-glare
LG Solar	LGXXXS1C-G3, LGXXXS1C-A3, LGXXXS1C-B3, LGXXXS1K-G3, LGXXXS1K-A3, LGXXXS1K-B3, LGXXXS1C-G4, LGXXXN1C-G3, LGXXXN1C-A3, LGXXXN1C-B3, LGXXXN1K-G4, LGXXXN1C-G4, LGxxxN2W-G4, LGXXXN2T-A4, LGXXXN2W-B3, LGxxxQ1C-A5, LGxxxE1C-A5, LGxxxN1K-A5, LGxxxN1C-A5, LGxxxS1C-A5, LGxxxQ1K-A5, LGxxxE1K-A5, LGXXXQ1K-A5, LGXXXA1C-A5, LGXXXN2T-A5, LGXXXN2W-A5
Trina Solar	TSM-XXX-PA05.05, TSM-XXX-PA05.08, TSM-XXX-PD05.05, TSM-XXX-PD05.08, TSM-XXX-PD14, TSM-DD05A.08(II), TSMDD05A.05(II), TSM-DD05A(II), TSM-PD05.08, TSM-PD05.05, TSM-PD05.08, TSM-PD05.05, TSM-PD05.10, TSM-DD05.08, TSM-PD14, TSM-PE14A, TSM-DD14A(II) STD MONO, TSM-DD14A(II) PERC MONO, TSM-DE14A(II) STD MONO, TSM-DE14A(II) PERC MONO

7.0 Illustrations

Illustration 1a- List of PV modules and Module Level Power Electronics evaluated with these racking systems Contd

PV Modules added based on evaluation for bonding only (List of evaluated and approved modules and module level electronics for use with Accessory Frame Bracket)	
Module manufacturer	Model numbers
Note: Module wattage is represented by XXX in product codes	
Yingli Solar YGE 60 Cell & YGE 72 Cell	YLXXXP-29b 40mm, YLXXXP-29b 35mm, YLXXXP-29b 1500V, YLXXXP-35b 1500V, YLXXXD-30b, YLXXXD-36b
Suniva	Black OPT XXX-60-4-1B0, Silver OPT XXX-60-4-100, MVX XXX-60-5-100, Black OPT XXX-60-4-1B1, Silver OPT XXX-60-4-101, Black OPT XXX-60-4-1B1, Silver OPT XXX-60-4-101, MVX XXX-60-5-800, MVX XXX-72-5-800
Hanwha	HSL60P6-PB-0-XXXT(W/B), HSL60P6-PB-4-XXXT(W/B), HSL60P6-PB-1-XXX(W/B), HSL72S-4BB-1-XXXB, HSL60P6-PA-0-XXXT (W/B), HSL60P6-PA-4-XXXT (W/B), HSL60P6-PB-2-XXXQ (W/B), HSL60P6-PB-3-XXXQ (W/B), HSL72P6-PB-0-XXXT (W/B),HSL72P6-PB-4-XXXT (W/B), HSL72P6-PB-1-XXX (W/B), HSL72P6-PA-0-XXXT (W/B), HSL72P6-PA-4-XXXT (W/B), HSL72P6-PB-2-XXXQ (W/B), HSL72P6-PB-3-XXXQ (W/B)
Canadian Solar	CS6P-XXXP, CS6P-XXXM, CS6P-XXXM All Black, CS6X-XXXP, CS6P-XXXM All Black, CS6U-XXXP, CS6U-XXXM, CS6U-XXXP, CS6U-XXXM, CS6U-XXXP (1500 V), CS6U-XXXM (1500 V), CS3U-P, CS3U-MS, CS6K-XXXP, CS6K-XXXP (1500V), CS6K-XXXM, CS6K-XXXM (1500 V), CS6KXXXM All Black, CS6K-XXXMS, CS6K-XXXMS All Black, CS3K-P, CS3K-MS
Renesola	JCXXXM-24/Bb, JXXXM-24/Bbv, JCXXXM-24/Bb, JCXXXM-24/Bbh, JCXXXS-24/Bb, JCXXXF-24/Bb-b, JCXXXS-24/Bb-b, JCXXXM-24/Bbs, JCXXXM-24/Bbw, JCXXXM-24/Abs, JCXXXM-24/Abw
Hyundai Solar	HiS-MXXXRG, HiS-SXXXRG, HiS-SXXXMF, HiS-MXXXMG, HiS-SXXXMG, HiS-MXXXRI, HiS-SXXXRI, HiS-MXXXTI, HiS-SXXXTI, HiSMXXXMI,HiS-SXXXMI
Mission Solar	MSExxxSQ5T, MSExxxSQ5K, MSExxxSO5T, MSExxxSO5K, MSExxxSQ6S, MSExxxSQ4S, MSExxxSO6J, MSExxxSO4J, MSExxxMM6J
Panasonic	VBHNxxxSA17, VBHNxxxSA11, VBHNxxxSA16, VBHNxxxSA16B, VBHNxxxSA15, VBHNxxxSA15B, VBHNxxxKA01, VBHNxxxKA03, VBHNxxxSA17
JA Solar	JAM6(K)-72-xxx/4BB, JAM6(K)-72-xxx/4BB, JAP6(K)-72-xxx/4BB, JAM6(K)-72-xxx/PR, JAM6(L)-72-xxx/PR, JAP6-72-xxx/4BB/RE
Solaria	PowerXT-xxxR-PX, PowerXT-xxxR-BX, PowerXT-xxxC-WX, PowerXT-xxxC-BX

7.0 Illustrations	
Illustration 1b- List of PV modules and Module Level Power Electronics evaluated with these racking systems Contd	
PV Modules added based on evaluation for bonding only **(List of evaluated and approved modules and module level electronics for use with Accessory Frame Bracket)**	
Module manufacturer	**Model numbers**
Note: Module wattage is represented by XXX in product codes	
Phono Solar	PSXXXP-20/U, PSXXXM-20/U, PSXXXP-24/T, PSXXXM-24/T
Q Cells	Q.PEAK-G3 XXX, Q.PEAK blk-G3 XXX, Q.PLUS-G3 XXX, Q.PEAK DUO-G5 XXX, Q.PEAK DUO BLK-G5 XXX, Q.PEAK G4.1 XXX, Q.PEAK BLK-G4.1 XXX, Q.PEAK-G4.1/MAX XXX, Q.PEAK-G4.1/TAA XXX, Q.PEAK BLK G4.1/TAA XXX, Q.PLUS G4 XXX, Q.PLUS BFR G4.1 XXX, Q.PLUS BFR G4.1/MAX XXX, Q.PLUS BFR G4.1/TAA XXX, Q.PRO G4 XXX, Q.PRO BFR G4 XXX, Q.PRO BFR 4.1 XXX, Q.PRO BFR 4.3 XXX, Q.PRO EC-G4.4 XXX, B.LINE PLUS BFR G4.1 XXX, B.LINE PRO BFR G4.1 XXX, G3, L-G4, L-G2, Q.PEAK L-G4.2 XXX, Q.PLUS L G4.1 XXX, Q.PLUS L G4.2 XXX, Q.PRO L G4 XXX, Q.PRO L G4.1 XXX, Q.PRO L G4.2 XXX, B.LINE PLUS L G4.2 XXX, B.LINE PRO L G4.1 XXX, B.LINE PRO L G.4.2 XXX
SolarWorld Sun Module	SWXXX POLY, SWXXX-MONO, SWXXX-MONO BLACK, SWXXX-XL MONO BLACK, SWXXX POLY WOB, SWA protect XXX duo, SWA protect XXX duo clear, SW XXX DUO, SWA XXX MONO, SWA XXX MONO BLACK, SWA XXX POLY, SWA XXX-MONO, SWA XXX-MONO BLACK, SW XXX XL-MONO, SW XXX XL DUO, SWA XXX XL DUO, SWA XXX XL-MONO
Silfab Solar	SLA-M-xxx, SLG-M-xxx, SLA-X-xxx, SLG-X-xxx, SLA-P-xxx, SLG-P-xxx, SSA-M-xxx, SSG-M-xxx, SSA-P-xxx, SSG-P-xxx

7.0 Illustrations

Illustration 1c- List of PV modules and Module Level Power Electronics evaluated with these racking systems Contd

PV Modules added based on evaluation for bonding only (List of evaluated and approved modules and module level electronics for use with Accessory Frame Bracket)	
Module manufacturer	**Model numbers**
Note: Module wattage is represented by XXX in product codes	
Seraphim Solar	SRP-xxx-6MB-BB, SRP-xxx-6MB, SRP-xxx-6PB, SRP-xxx-6PA, SRP-xxx-6MA
SunPower	SPR-X21-xxx, SPR-E20-xxx, SPR-P17-xxx-COM
Axitec	AC-XXXP/156-60S, AC-XXXM/156-60S, AC-XXXP/156-72S, AC-XXXM/156-72S
REC	REC Twin Peak 2 (BLK), REC Twin Peak 2 BLK2, REC N-Peak, REC Twin Peak 2S 72, REC Twin Peak 2S 72 XV, REC Twin Peak 2SB 72 XV (Bifacial)
Boviet Solar	BVM6610M-xxx, BVM6610P-xxx, BVM6612P-xxx, BVM6612M-xxx
Jinko Solar	JKMXXXP-60 , JKMXXXP-72, JKMXXXPP-60, JKMXXXPP-72, JKMXXXM-60, JKMXXXM-72, JKMxxxP-60B, JKMxxxPP-60B, JKMxxxPP-60(Plus), JKMxxxP-60-J4, JKMxxxPP-60-J4, JKMxxxP60B-J4, JKMxxxPP60B-J4, JKMxxxPP-60-V, JKMxxxM-60-V, JKMxxxM-60B, JKMxxxM-60-J4, JKMxxxM60B-J4, JKMxxxP-72B, JKMxxxPP-72B, JKMxxxP-72-J4, JKMxxxP-72B-J4, JKMxxxPP-72-J4, JKMxxxPP-72B-J4, JKMxxxPP-72(Plus), JKMxxxPP-72-V, JKMxxxM-72B, JKMxxxM-72-J4, JKMxxxM- 72B-J4, JKMxxxM-72-V

This authorizes the application of the Certification Mark(s) shown below to the models described in the Product(s) Covered section when made in accordance with the conditions set forth in the Certification Agreement and Listing Report. This authorization also applies to multiple listee model(s) identified on the correlation page of the Listing Report.

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Report Issuing Office: Lake Forest, CA

Control Number: *4008516*   **Authorized by:** _Danielle Lauber_

for Dean Davidson, Certification Manager

RECOGNIZED COMPONENT

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Intertek

This document supersedes all previous Authorizations to Mark for the noted Report Number.

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Standard(s):	Mounting Systems, Mounting Devices, Clamping/Retention Devices, and Ground Lugs for Use with Flat-Plate Photovoltaic Modules and Panels [UL 2703:2015 Ed.1]
Product:	Accessory Frame Bracket installed using QMAFBU Installation Instructions, Feb-2018, Rev 2
Brand Name:	Accessory Frame Bracket
Models:	QMAFB Accessory Frame Bracket and QMAFBU Accessory Frame Bracket.