

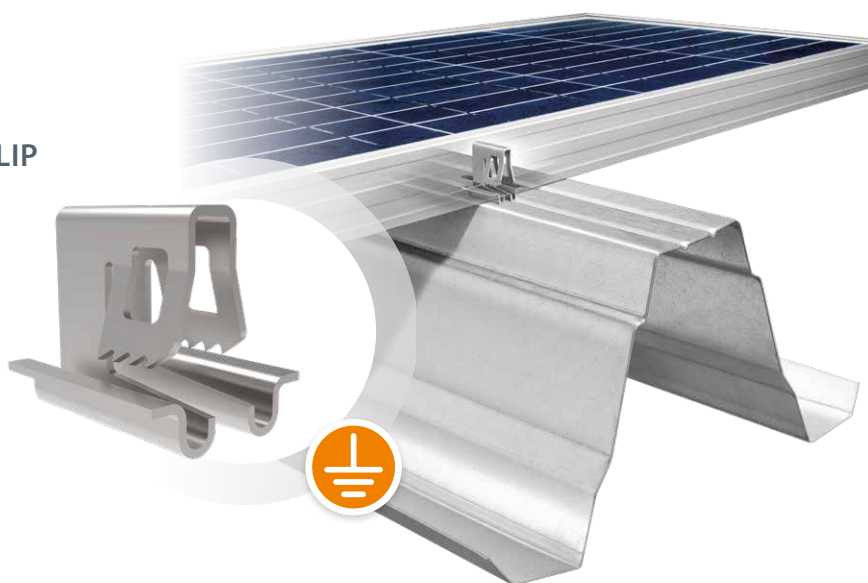
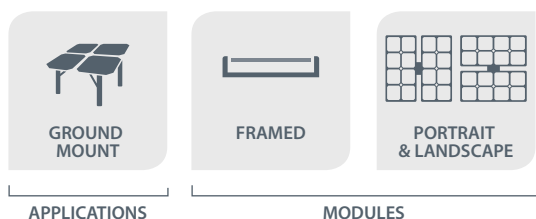
# FASTENING & GROUNDING CLIP FOR FRAMED MODULES



Screwless and tool-free clipped fastening solutions provide fast and simple assembly, enabling customers to reduce the overall cost of renewable energies.

## PowAR™ Slot

COMBINED **FASTENING & GROUNDING** CLIP  
FOR FRAMED PV MODULE



## Benefits

### QUICK

- Fastening and grounding in a single operation.
- 1 module installed in less than 30 seconds<sup>(1)</sup>.

### COST SAVING

- Quick and tool free installation
- Lower maintenance costs: screwless, no periodic torque control required
- Hot spot risk reduction for PV modules thanks to elastic mechanical clamping<sup>(2)</sup>



### EASY TO USE

- Easy panel alignment, specifically designed for uneven terrain
- Installation friendly: clips can be inserted from underneath the array
- Easy to dismount from the module's backside

### APPROVALS

- Clip tested by ARaymond Energies test center
- Qualified by major module manufacturers<sup>(3)</sup>
- Tested by SERMA TECHNOLOGIES according to IEC 61215 - 2016

(1) According to field tests results available upon request.

(2) Mechanical shocks and daily thermal cycles often induce micro-cracks within cells, leading to hot spots and power output degradation.

(3) Report available upon request.

# PowAR™ Slot: FASTENING & GROUNDING CLIP FOR FRAMED MODULES OR GROUND MOUNT



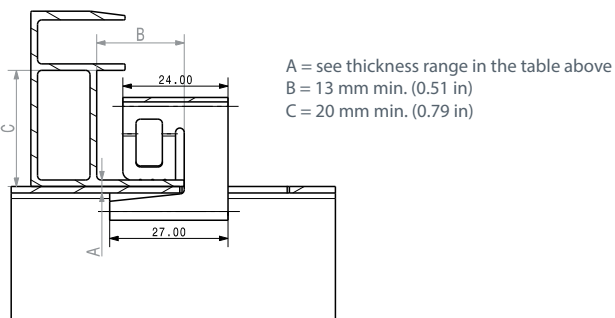
## TECHNICAL SPECIFICATIONS

		POWAR™ SLOT S	POWAR™ SLOT L	POWAR™ SLOT XL	
PRODUCT DETAILS	ARTICLE N°	269872	265165	265166	
	RANGE (RAIL + FRAME THICKNESS = A)	in mm	2,0 to 2,7	2,6 to 3,6	3,5 to 4,2
		in inches	0.08 to 0.11	0.10 to 0.14	0.14 to 0.17
	DIMENSIONS	in mm	27 x 22 x 25		
		in inches	1.06 x 0.87 x 0.98		
	MATERIAL	Steel 1.1231 - DIN EN 10132:2000			
SURFACE TREATMENT	Aluminum enriched Zinc flake coating				
WEIGHT IN G	12,8				
PERFORMANCES	STATIC & DYNAMIC MECHANICAL RESISTANCE	Static Load +5400/-2400 Pa compliant with IEC 61215-1-2.16:2016 and Dynamic Load compliant with IEC/TS 62782 :2016			
	CORROSION RESISTANCE	No red rust after 720 hours salt spray acc. EN 60068-2-11:1999			
	GROUNDING CONTINUITY	Compliant with IEC 60439-1: 2004 8.2.4.1			
ENVIRONMENT	PV MODULE SPECIFICATIONS	Module with minimum lip thickness D of 1,1 mm and lip length B of 13 mm (see technical drawing) for modules surface of 2,3 m <sup>2</sup> Max (for higher dimensions, please contact us).			
	RAIL SPECIFICATIONS	Standard steel rails (see technical drawing)			

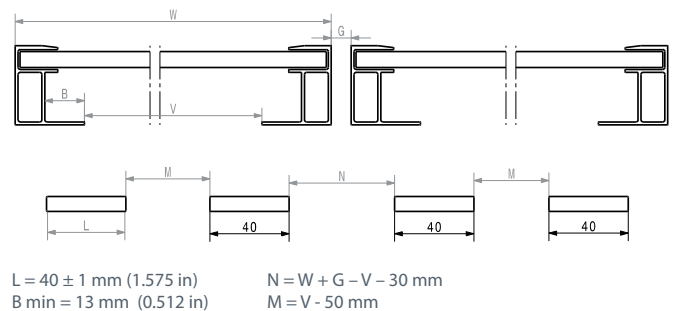
Product information disclosed in this "datasheet" can be modified without any previous notice. Please refer to our instruction manual.

## EXAMPLES OF RAIL SPECIFICATIONS

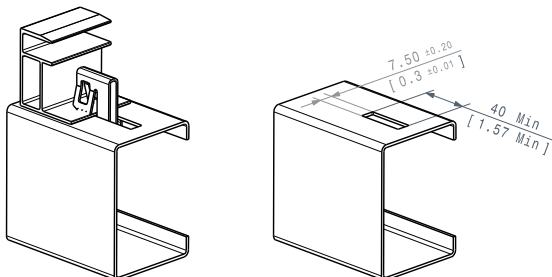
### Cross section view & PV module specifications



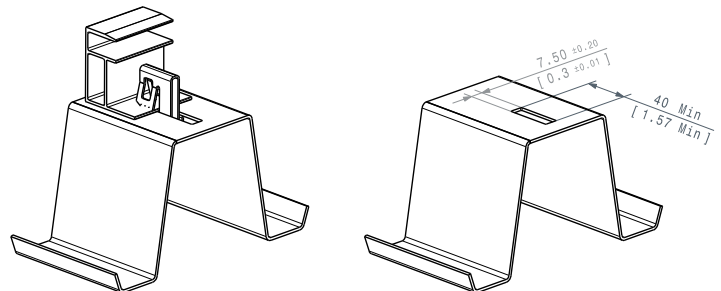
### Rail interface design rules for adjustment capability of ±15 mm



### C-Shape configuration



### Hat-Shape configuration



[www.araymond-energies.com](http://www.araymond-energies.com)



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