

## Femtogrid Solar Power Optimizer PO310 Module Add-On



## Maximum Solar Energy using Femtogrid Solar Power Optimizers

Femtogrid optimizes and monitors the energy generated per module generating full visibility for the system owner and alerts for the installer and system integrator in order to perform problem-free service. The parallel system architecture combined with our internal software controls makes Femtogrid the safest system.

### Femtogrid Solar Power Optimizer PO310

- Superior MPPT efficiency >99.9%
- Maximum Power Point Tracking (MPPT) per module
- Up to 30% more energy for faster return on investment
- Early start and late shutdown per module
- Module level monitoring
- Module level safety
- Solves the negative system impact of shading conditions, module mismatch, aging mismatch, soiling mismatch and temperature variance
- Makes it possible to combine different azimuths and/or tilts in one system



*Femtogrid Solar: the sunny side of shade*

## Femtogrid Solar Power Optimizer PO310 Module Add-On



We are Femtogrid. We provide **renewable energy solutions**. Our products generate more energy and measurably higher efficiency per system. We achieve these results by applying unique and patented technology in our products.

The Femtogrid Solar Power Optimizer PO310 is our smart solution for solar installations. It is a module add-on and must be used together with:

- Femtogrid Inverter 2400 or our Inverter Independent solutions
- Femtogrid Cabling
- Femtogrid Monitoring

### Specifications Femtogrid Solar Power Optimizer PO310

<b>Solar Input (DC from modules)</b>		
Maximum DC power	310	W
Nominal DC power	300	W
MPPT operating voltage range	8 - 42	Vdc
Vin min-max	5 - 55	Vdc
Maximum DC current	11	A
MPPT	Decentralized per module	
Compatible with types of modules	Mono- and polycrystalline	
<b>Power Optimizer Output (DC out)</b>		
Nominal DC power	310	W
Nominal output voltage (Femtogrid voltage)	380	Vdc
Maximum output current	0.9	A
Efficiency	>97	%
MPPT efficiency	>99.9	%
Efficiency, European related (Euro ETA)	>97	%
<b>Standard Compliance</b>		
EMC: Immunity	EN61000-4-2/3/4/5/6/11	
EMC: Emission	EN55022/EN60601-1-2	
	EN55022/EN61000-3-3	
Safety	EN60950	
CE/RoHS/WEEE/REACH	Yes	
Safety class	Class II	
Degree of protection	IP67	
<b>General</b>		
Relative humidity (non-condensing)	0 - 95	% RH
Dimensions with bracket (WxLxH)	135x225x50	mm
Ambient temperature	-40/+65	°C
Weight	0.75	kg
DC connections	MC4	Type
Output connections	3 Pole ALTW/Femtogrid	Type
Switch-on power	0.5	W
Safetyline voltage ('safety')	48	Vdc