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.

**Maximum Solar Energy using Femtogrid Solar Power Optimizers**

- 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
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

#### Solar Input (DC from modules)
- 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

#### Power Optimizer Output (DC out)
- 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%

#### Standard Compliance
- 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

#### General
- 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