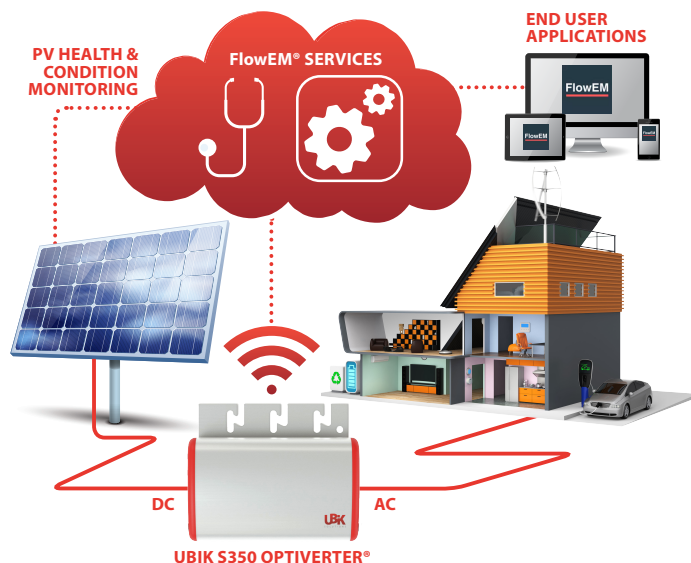


# FlowEM<sup>®</sup> SMART ENERGY MANAGER

**FlowEM<sup>®</sup>** is an energy manager that monitors, analyzes and manages energy production over the cloud in order to optimize household processes, improve energy efficiency, decrease the costs and offer enhanced user experience.



The UBIK S350 OPTIVERter<sup>®</sup> has a **built-in Wi-Fi Interface**. This allows direct communication through any of the existing routers. Wi-Fi has been chosen as the most widely usable and reasonable communication solution for the end user.

## FlowEM FEATURES:

- ⌚ Monitoring & data collection
- ⌚ Remote diagnostics
- ⌚ Analysis & charting
- ⌚ Reports
- ⌚ Automatic software updates incl. grid specifications
- ⌚ Control & system optimization



## UBIQUITOUS EXPERIENCE

**60-CELL & 72-CELL**  
COMPATIBLE WITH MOST PV MODULES

**350 W**  
MAXIMUM PV MODULE POWER – NO POWER CLIPPING

**8...60 VDC**  
SHADE-TOLERANT MAXIMUM POWER POINT TRACKING

**SMART SOLUTION**  
PURE PLUG & PLAY

**BIPV READY**  
BUILDING INTEGRATED PV CONNECTIVITY



# UBIK S350 OPTIVERter<sup>®</sup>

THE NEXT GENERATION  
SMART SOLAR EXPERIENCE

**UBIK Solutions Ltd.** is a young and agile technology company dedicated to innovative & smart solutions for sustainable energy industry.

## UBIK SOLUTIONS OÜ

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- 🌐 [ubiksolutions.eu](http://ubiksolutions.eu)
- 📘 [facebook.com/UbikSolutions](https://facebook.com/UbikSolutions)
- 🌐 [linkedin.com/company/ubik-solutions](https://linkedin.com/company/ubik-solutions)
- 🌐 [flowem.eu](http://flowem.eu)

**OPTIVERter® TECHNOLOGY** is based on a brand new, patented and market leading energy conversion solution for module level power electronics (MLPE) solar industry, combining the key advantages of the PV microinverters and PV power optimizers, allowing direct AC connectivity of the PV module, highest possible performance, inherent safety and system reliability.

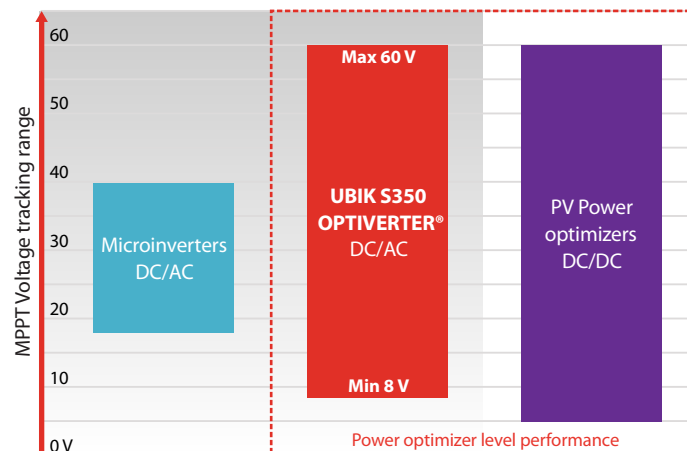
### COMBINES THE KEY ADVANTAGES OF MICROINVERTERS AND POWER OPTIMIZERS!

AS MICROINVERTER = BETTER RELIABILITY AND FUNCTIONALITY  
AS POWER OPTIMIZER = BETTER SHADE TOLERANCE & ENERGY HARVEST

60-cell PV panels consist of **three substrings**. When shades or debris cover them, the MPPT drops proportionally up to 1/3:



OPTIVERter® capability to perform MPPT down to very low voltages **results in maximum energy harvesting.**



The power converter technology has been proven via prototypes and numerous field testings and the control algorithm is patented in Estonia, US and pending in EU.

## UBIK S350 OPTIVERter®

### THE NEXT GENERATION SMART SOLAR EXPERIENCE



**UBIK S350 OPTIVERter®** is a powerful, plug & play device, supporting decentralized energy production and offering the most affordable energy conversion approach for small to medium PV installations to maximize energy harvest and reach lower levelized cost of electricity (LCOE).

## PRODUCT ADVANTAGES:



### MAXIMIZED POWER FROM EACH PV MODULE

No power clipping & excellent tolerance to shading thanks to PV power optimizer-like maximum power point tracking (MPPT) voltage range



### LOWER ACQUISITION COST

No additional external communication gateway—built-in Wi-Fi integrated into PCB—nor additional cabling needed: truly **all-in-one device**



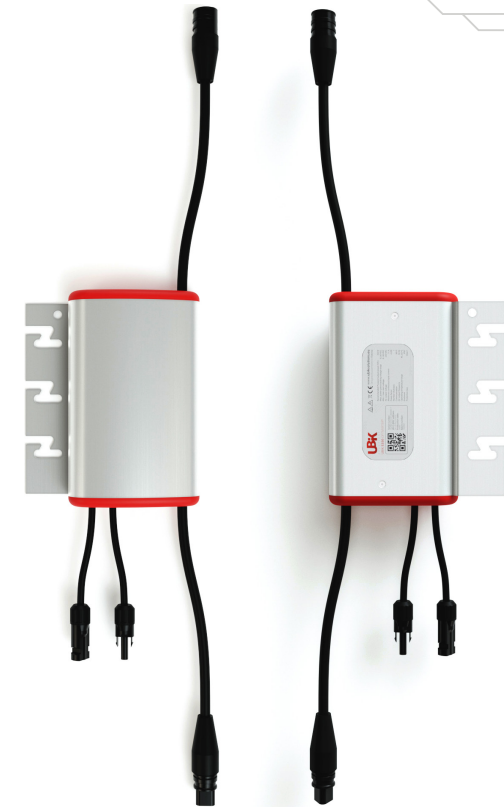
### INTEGRATED MANAGEMENT TOOLS

Fast and secure communication with cloud-based user interface offering PV module level monitoring and analytics



### HIGH RELIABILITY & SECURITY

IP67 enclosure with integrated galvanic ground isolation and a lifespan warranty of 25 years



## UBIK S350 OPTIVERter® TECHNICAL DATA:

- Compatibility: **All 60-cell and 72-cell PV modules**
- Maximum PV module STC power: **350 W**
- Absolute maximum input voltage: **60 VDC**
- MPPT voltage range: **8...60 VDC**
- Nominal output voltage: **230 VAC**
- Output frequency: **50 Hz**
- Enclosure: **IP67**
- Power quality: **EN50160**
- CEC efficiency: **95%**
- Static MPPT efficiency: **99.5%**
- Communication: **Wi-Fi (IEEE 802.11 b/g/n)**
- Dimensions (H x W x D): **215 x 174 x 47 mm**
- Operating temperature: **-40°C...+65°C**
- Cooling: **Natural convection**