

PowerStick

350

Micro-Inverter for PV Modules

Based on our unique high-frequency technology, the PowerStick 350 is the smallest and fastest inverter in the world. Its unique thermal management guarantees superior lifetime and reliability. Thanks to its miniaturized design, the inverter can even be integrated into the frame of PV modules to create true plug & play AC modules.



Key Features



Superior energy yield

Highest yields with shade-tolerant substring design
Unsurpassed low-light performance



Highest reliability

25 years limited warranty (in combination with Solarnative IntelliGate)
Unique thermal design leads to minimized failure rates



Easy installation

Ultra-long string design for East-West configuration
Plug & Play over-the-air commissioning
No data cables anywhere
Auto-detection and location of missing connectors
Automatic roof mapping / smart layout function



High-efficiency module design

No by-pass diodes required for cells strings up to 60 cells in series
Reverse-bias control eliminates hot cells and hot spots
Enabler for high-efficiency heterojunction and Perovskite tandem technology



Inherent safety

No high DC voltages during installation and operation (no risk of fire)
Self-limiting string design

Models

PS-350-a: Add-on version that is compatible with standard PV modules and can either be pre-assembled into the frame of the module by the module manufacturer or be mounted to the mounting structure by the installer.

PS-350-i: Module-integrated version for frame-integration of AC modules.

Technical Data

Input (DC)	PS-350-a	PS-350-i
Recommended module power	Up to 440 Wp	
DC connector	2 DC cable (2.5 mm ²) with Stäubli MC4 connectors	DC connector without cables
Minimum open-circuit voltage at standard operating conditions (STC)	25V	
Maximum open-circuit voltage at STC	60V	
Current (DC)	< 20 A	
Over-voltage class	II	

Output (AC)	PS-350-a	PS-350-i
Continuous output power (at 240 V)	350 W	
European efficiency	> 96 %	
Nominal voltage	230 V @ 50 Hz / 240 V @ 60 Hz	
Current	Max 1.5 A	
Max. Power factor	> 0.99	
Active power factor control	Down to 0.9	
Over-voltage class	II	
Nominal frequency	50-60 Hz	
NS-protection	Integrated, no separate relay box required	

General Data	PS-350-a	PS-350-i
Dimensions without connectors (length x width x height)	370 mm x 23.9 mm x 22.3 mm (14.6 in x 0.9 in x 0.9 in)	
Total length	535 mm (21.1 in) including DC cables	403.5 mm (15.9 in)
Recommended module frame height	32-35 mm	
Weight	320 g (8.8 oz)	350 g (9.9 oz)
Cooling	Natural convection	
Ingress protection	IP55	
Noise emission	< 40 dB	

Compliance	PS-350-a	PS-350-i
Certifications (pending)	UL1741:2021, UL 1741 SA, IEEE1547:2018, IEC/UL 62109-1, IEC 62109-2, IEC 62109-3, CA Rule 21, (EU) 2016/631, VDE-AR-N 4105, NEC 2020 section 690.12 Rapid Shutdown	

Smart Energy Home System Architecture

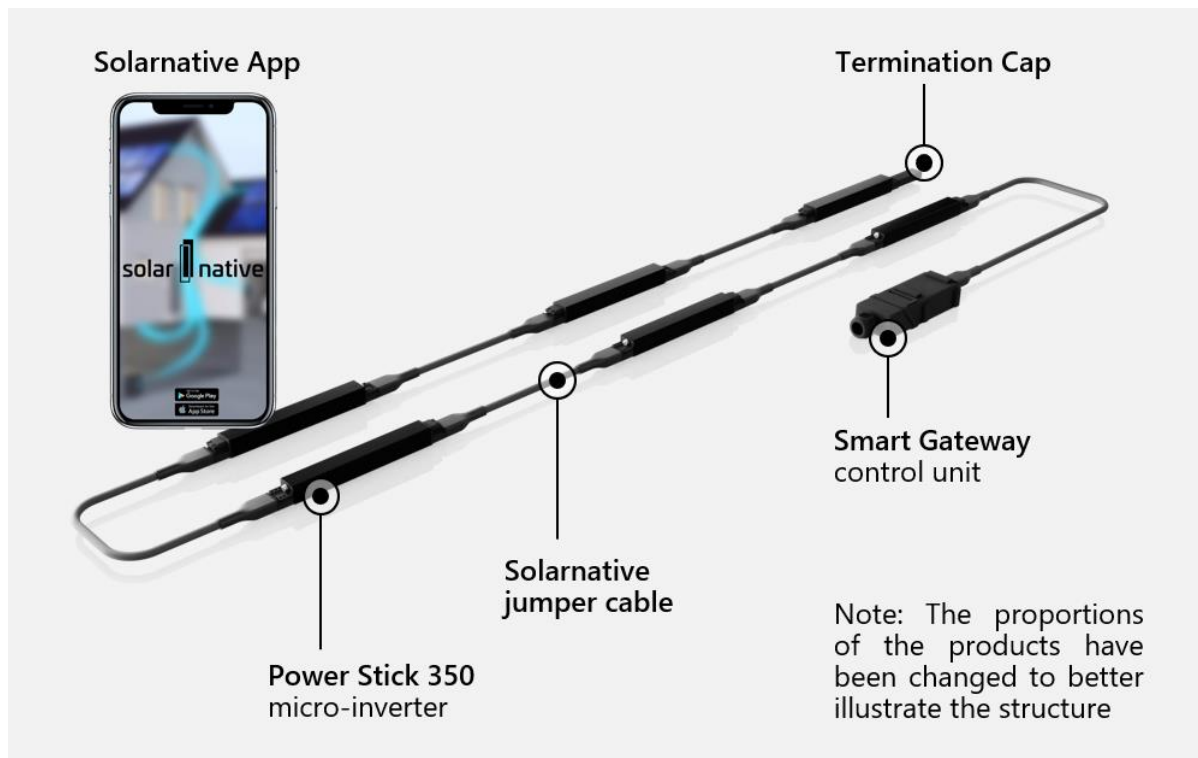


Illustration: Example setup with six PV modules

System	PS-350-a	PS-350-i
Maximum current per string	20 A	
Number of inverters per string	Unlimited. Self-regulated system. No minimum number of inverters.	
Recommended maximum number of inverters per string	South orientation: up to 13 modules East-West orientation: up to 20 modules facing east + up to 20 modules facing west	
System components	PowerStick, connection cable, termination cap, IntelliGate (optional: PowerMeter)	
Connectivity	Powerline communication from PowerStick to IntelliGate, LoRa to other system devices, LTE to cloud server	