

UBIK S400 OptiVerter ® DC DATASHEET



The **UBIK S400 OPTIVERTER DC** is a smart, pure plug & play device, supporting decentralized renewable energy production and offering the most affordable energy conversion approach for residential and small to medium commercial PV installations thanks to the usage of the **OptiVerter Technology**. This allows to maximize energy harvest and reach lower levelized cost of electricity compared to MLPE (Module Level Power Electronics) solutions available on the market today.

UNPRECEDENTED PERFORMANCE

Our **shade-tolerant MPPT** (Maximum Power Point Tracking) with extended input voltage range (8 to 60 VDC) keeps the S400 OptiVerter® DC working where others simply can't, resulting in **up to 30% better energy harvest** than any traditional microinverter.

1

ALL-IN-ONE, PLUG & PLAY DEVICE

Easy and safe to install and use, the S400 OptiVerter® DC works with all 60-cell and 72-cell PV modules with the nominal STC power of up to 400W. Built-in WiFi communication gateway and wiring plus higher efficiency result in lower Levelized Cost Of Electricity (LCOE) for system owners.

INTEGRATED MANAGEMENT TOOLS

PV module-level monitoring and analytics, including estimation of PV panel life and **advanced diagnostics** via **FlowEM**®, our smart energy management platform. Featuring **OTA software updates**, your S400 OPTIVERTER® DC will constantly receive the latest improvements.



UBIK S400 OptiVerter® TECHNICAL SPECIFICATIONS

•		
	INPUT DATA (DC)	
Model number	S400DC-3	S400DC-7
Maximum PV module STC power	400 W	
Compatibility	All 60- and 72-cell PV modules	
Maximum input DC voltage	60 VDC	
MPPT voltage range	860 VDC	1660 VDC
Min / Max PV panel OC start voltage	10/60 VDC	20/60 VDC
Max PV panel short circuit current	15 A	
OUTPUT DATA (DC)		
Maximum continuous output power	350 W	
Maximum output current	1.4 A	0.7 A
Nominal voltage	350 VDC*	700 VDC*
Droop control voltage range	320 – 380 VDC*	640 – 760 VDC*
EFFICIENCY		
CEC weighted efficiency	95 %	94 %
Static MPPT efficiency	00 F	0/
(weighted, reference EN50530)	99.5 %	
MECHANICAL DATA		
Ambient temperature range	-45+65 °C	
Dimensions (WxHxD)	215 x 174 x 47 mm	
Weight	2.2 kg**	
Cooling	Natural convection	
Enclosure environmental rating	Outdoor / IP67**	
PV connector type	15cm 6mm ² wire with MC4 connector	
Output connector type	Trunk cable with	4x1.5mm2 cable without
	Wieland RST 20i4 connector	connector***
Grid connection topology	Daisy chain connection	Backbone connection
FEATURES		
Communication	Wi-Fi (IEEE 802.11 b/g/n)	
DC Safety and system integration	SafetyWire, Current/OS®,DC grid anti-islanding****	
	High-frequency galvanic isolation. The need for additional	
Integrated ground	Grounding Electrode Conductor (GEC) or ground depends on	
	the local normative.	
Monitoring	FlowEM® Cloud Smart Energy Management Platform, local	
	MQTT client, Modbus TCP/IP	
Compliance LVD, RED, EMC, RoHS		
* output voltage and droop window are adjustable during manufacturing or via the OTA updates upon request		

* output voltage and droop window are adjustable during manufacturing or via the OTA updates upon request
** bare PCB without waterproof compound with reduced weight available for internal installations

*** alternative cabling is available upon request

**** enabled upon request

2

Changes to products and services, including those resulting from country-specific requirements, and deviations from technical data are subject to change without notice. UBIK Solutions assumes no liability for mistakes or printing errors. For the latest information, please visit <u>www.ubiksolutions.eu</u>.

UBIK S400 OptiVerter[®] DC and FlowEM[®] Smart Energy Management Platform are registered trademarks of UBIK Solutions B.V. SafetyWire[®] and Current/OS[®] are registered trademarks of Direct Current B.V.