

Solar Input	3K	3.6K	4K	4.6K/5K
Max. DC Input Power	6600W	7000W	7000W	8000W
Nominal DC Input Voltage	360V.d.c	360V.d.c	360V.d.c	360V.d.c
DC Input Voltage Range	100 - 550V.d.c	100 - 550V.d.c	100 - 550V.d.c	100 - 550V.d.c
MPPT Voltage Range	120 - 500V.d.c	120 - 500V.d.c	120 - 500V.d.c	120 - 500V.d.c
Start-up Voltage	140V.d.c	140V.d.c	140V.d.c	140V.d.c
MPPT Number	2	2	2	2
Max. DC Input Current	12.5A/12.5A	12.5A/12.5A	12.5A/12.5A	12.5A/12.5A

Battery Input/Output				
Compatible Battery Type	Lithium-ion/Lead-Acid	Lithium-ion/Lead-Acid	Lithium-ion/Lead-Acid	Lithium-ion/Lead-Acid
Nominal Battery Voltage	48V.d.c	48V.d.c	48V.d.c	48V.d.c
Battery Voltage Range	40 - 60V.d.c	40 - 60V.d.c	40 - 60V.d.c	40 - 60V.d.c
Max. Charge/Discharge Current	66A/66A	66A/66A	66A/66A	66A/66A
Max. Charge/Discharge Power	3600W/3600W	3600W/3600W	3600W/3600W	3600W/3600W
Charging Curve	3 stages	3 stages	3 stages	3 stages
Max. Charge Voltage	59V	59V	59V	59V
Capacity of Battery	2-20kWh	2-20kWh	2-20kWh	2-20kWh

AC Input/Output				
Nominal AC Output Power	3000W	3600W	4000W	4600W/5000W
Max. AC Output Power	3000VA	3600VA	4000VA	4600VA/5000VA
Max. AC Output Current	15A	16A	20A	25A
Nominal AC Voltage	230V.a.c	230V.a.c	230V.a.c	230V.a.c
AC Voltage Range	180 - 270V.a.c	180 - 270V.a.c	180 - 270V.a.c	180 - 270V.a.c
Nominal AC Frequency	50Hz / 60Hz	50Hz / 60Hz	50Hz / 60Hz	50Hz / 60Hz
AC Frequency Range	45 - 55Hz / 55 - 65Hz	45 - 55Hz / 55 - 65Hz	45 - 55Hz / 55 - 65Hz	45 - 55Hz / 55 - 65Hz
Power Factor	Adjustable 0.8 overexcited to 0.8 underexcited			
THDI	<3%	<3%	<3%	<3%

UPS Output - with Battery				
UPS Max. Output Power without Solar	3000W	3600W	3600W	3600W
UPS Max. Output Power with Solar	3000W	3600W	4000W	4800W
UPS Nominal Output Voltage	230V.a.c	230V.a.c	230V.a.c	230V.a.c
UPS Nominal Output Frequency	50Hz / 60Hz	50Hz / 60Hz	50Hz / 60Hz	50Hz / 60Hz
UPS Nominal Output Current	13A	13A	13A	13A
Peak Power Without Solar	4500W, 30s	4500W, 30s	4500W, 30s	4500W, 30s
THDV	<5%	<5%	<5%	<5%
Switching Time	Typical 0.01s	Typical 0.01s	Typical 0.01s	Typical 0.01s

Efficiency				
Europe Efficiency	97.5%	97.5%	97.5%	97.5%
Max. Efficiency	97.9%	97.9%	97.9%	97.9%
Battery Charge/Discharge Efficiency	94.5%	94.5%	94.5%	94.5%

Protection				
Reverse Polarity Protection	Yes	Yes	Yes	Yes
Over Current/Voltage Protection	Yes	Yes	Yes	Yes
Anti-islanding Protection	Yes	Yes	Yes	Yes
AC Short-circuit Protection	Yes	Yes	Yes	Yes
Leakage Current Protection	Yes	Yes	Yes	Yes
Ground Fault Monitoring	Yes	Yes	Yes	Yes
Grid Monitoring	Yes	Yes	Yes	Yes
Ingress Protect Degree	IP65 / NEMA4X	IP65 / NEMA4X	IP65 / NEMA4X	IP65 / NEMA4X
DC Switch	Yes	Yes	Yes	Yes

General Data				
Dimensions (W/H/D)	455 / 476 (565) / 181	455 / 476 (565) / 181	455 / 476 (565) / 181	455 / 476 (565) / 181
Weight	20 kg	20 kg	20 kg	20 kg
Topology	Tranformerless (solar), HF (Battery)	Tranformerless (solar), HF (Battery)	Tranformerless (solar), HF (Battery)	Tranformerless (solar), HF (Battery)
Cooling Concept	Natural Convection	Natural Convection	Natural Convection	Natural Convection
Relatively Humidity	0-100%	0-100%	0-100%	0-100%
Operating Temperature Range	-25 - 60	-25 - 60	-25 - 60	-25 - 60
Altitude	<2000m	<2000m	<2000m	<2000m
Noise Emission	<25dB	<25dB	<25dB	<25dB
Standby Consumption	<5W	<5W	<5W	<5W
Display & Communication Interfaces	LCD, RS485, Wi-Fi, Ethernet	LCD, RS485, Wi-Fi, Ethernet	LCD, RS485, Wi-Fi, Ethernet	LCD, RS485, Wi-Fi, Ethernet

Certification & Approvals	
	AS 4777, VDE-AR-N4105, VDE0126, G83, G59, EN50438, CEI0-21, NRS097 IEC62109-1-2, IEC62040, EN61000-6-1, EN61000-6-2, EN61000-6-3