

REFU*sol* 003K–005K

For use at home



- Light & compact
- Highest efficiency (97.7%)
- Natural convection cooling
- Outdoor (IP66)
- Maintenance free

In the market for single-phase¹⁾, transformerless string inverters, we offer the REFU*sol* inverter with nominal power of 3.6 to 4.6 kW. These feed into the low voltage network and their **high IP66 protection class** makes them particularly suitable for roof systems from 3.6 kW upwards, installed either inside or out. Thanks to fast and precise MPP tracking, efficiency levels of up to 97.7% are possible.

Our data management system REFU*log* enables you to display and evaluate operating and performance data for each PV system. With the **integrated RS485 interface**, our REFU*pmu* power management unit, and an Internet connection you can monitor your system via the inverter at any time, anywhere in the world, on your computer or on a smartphone using the REFU*log app*.

¹⁾Feed-in: 1 phase

TECHNICAL DATA	REFUsol 003K	REFUsol 004K	REFUsol 005K
Art. no.	801R003	801R004	801R005

DC DATA

Max. PV power, kW	4.3	4.9	5.4
MPPT range, V	350 ... 710	351 ... 710	348 ... 710
Max. DC voltage, V	880		
Max. DC current, A	11.5	13.0	14.5
MPP tracker	1		
Number of DC connections	2		

AC DATA

Rated AC power, kVA	3.68	4.12	4.6
Max. AC active power, kW	3.68	4.12	4.6
AC grid connection	3 AC 400 V + N, 47,5–52,5 Hz (feed-in: 1 phase)		
Rated power factor	1		
Adjustable displacement factor	0.9i ... 1 ... 0.9c		
Max. AC current, A	16	17.9	20
Distortion factor THD, %	< 3	< 3	< 3
Max. efficiency, %	97.7		
European efficiency, %	97.4		
Feed-in starting power, W	7		
Nighttime power consumption, W	< 2		

COOLING, AMBIENT CONDITIONS, EMC

Cooling	Natural convection		
Ambient temperature, °C	-20 ... +60		
Elevation	Up to 2000 m above sea level		
Internal overvoltage protection, type	3 (acc. to EN 61643-11)		
Protection class	I (acc. to IEC 62103)		
Overvoltage category	DC: II, AC: III (acc. To IEC 60664-1)		
Environment classification	4K4H acc. to DIN IEC 721-3-4		
Certification	Current certificates can be found at http://europe.refusol.com/certifications.pdf		
SZS or grid protection	Acc. to VDE 0126-1-1		
Interfaces	RS485 & RS232		

GENERAL DATA

Type of protection	IP66 as per EN 60529		
Dimensions Width/Height/Depth, mm	320/720/250		
Weight, kg	27	27	28