

REFU*sol* 50K-4T

The control center of tomorrow

- 4 MPP trackers
- Max. Efficiency up to 98.6 %
- Long-lasting AC overload capacity of 110 %
- Compatible with legacy REFU*sol* inverters



The state-of-the-art **REFU*sol* 50K** inverter is an efficient solution for commercial and industrial PV systems. With its 4 MPP trackers, it offers flexibility in designing different system configurations to meet specific requirements. Its compact dimensions and high power density per weight make it extremely versatile, whether on the roof or in ground-mounted systems. This inverter is ideal for small to medium sized projects.

Inverters can be easily integrated into local networks using various connection options such as Ethernet or WiFi loggers. A dedicated online platform, **REFU*view***, enables efficient remote monitoring and ensures reliable system oversight throughout the warranty period. As part of continuous product development, **REFU*view*** offers a modern interface and improved functionality to support seamless connectivity and detailed performance insights.



REFU*sol* 50K-4T
853P050

Art. No.

DC DATA

Max. recommended PV power (kWp)	75
Max. input voltage (V)	1100
Rated input voltage (V)	620
Start-up input voltage (V)	200
Operating input voltage range (V)	180 - 1000
MPPT voltage range (V)	540 - 850
Number of independent MPPT	4
Number of DC inputs	2 for each MPPT
Max. current per MPPT (A)	40
Max. short circuit current per MPPT (A)	50
DC connection	MC4

AC DATA

Rated power (kW)	50
Max. AC power (kVA)	55
Max. output current (A)	83.3
Nominal grid voltage (V)	3P/N/PE: 230/400
Grid voltage range (V)	310 - 480
Nominal grid frequency (Hz)	50 , 60
Grid frequency range (Hz)	45 - 55 / 55 - 65
Active power adjustable range (%)	0 - 100
Total harmonic distortion (THDi) (%)	<3
Adjustable power factor range	1 (0.8 inductive ... 0.8 capacitive)
AC connection	OT (M6)

PERFORMANCE

Max. efficiency (%)	98.8
Weighted efficiency (EU/CEC) (%)	98.2

PROTECTION

DC switch	integrated
Safety protection	Anti-islanding, DC reverse polarity, Anti reverse power function, Ground fault, RCMU, Overtemperature, Overvoltage, Overcurrent.
String monitoring	each MPPT
Protection class / overvoltage category	Class I / DC and AC: Type II standard

COMMUNICATION

RS485 / USB	yes / yes
Ethernet / WiFi	optional (Art. No. 924024) / optional (Art. No. 924025)

GENERAL DATA

Ambient temperature (°C)	-30 ... +60
Self-consumption at night (W)	< 3
Topology	transformerless
Type of protection	IP65
Allowable rel. air humidity range (%)	0 ... 100
Max. operating latitude (m)	4000
Noise level (dBA)	< 60
Weight (kg)	37
Cooling	Active
Dimension (H x W x D) (mm)	480 x 585 x 220
Display	LCD
Certification	EN/IEC 61000-6-1 / 2 / 3 / 4, EN/IEC 62109-1 / 2, IEC62116, IEC 61727, IEC61683, IEC 60068 (1, 2, 14, 30), V 0126-1-1, VDE-AR-N 4105, CEI 0-21, UNE 217 002, EN 50549-1, G99, NRS 097-2-1, VDE 4110
Warranty	10 years