

REFU*sol* 20K-3T

New flexibility meets compatibility

- 3 MPP trackers
- Max. Efficiency up to 98.6 %
- Long-lasting AC overload capacity of 110 %
- Compatible with older REFU*sol* inverters
- Suitable for repowering applications

The innovative **REFU*sol* 20K** inverter offers a modern solution for commercial and industrial PV systems. With its 3 MPP trackers, it enables flexible adaption to different system designs and individual requirements. Its compact design and high power density per weight make it extremely versatile, whether on roofs or in ground-mounted systems. This inverter is the ideal choice for small to medium-sized projects. It is also compatible with legacy REFU*sol* inverters.

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 20K-3T
853P020.010**

Art. No.

DC DATA

Max. recommended PV power (kWp)	30
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)	480 - 850
Number of independent MPPT	3
Number of DC inputs	2 for each MPPT
Max. current per MPPT (A)	40
Max. short circuit current (A)	50
Max. power per MPPT input (kW)	20
DC connection	MC4

AC DATA

Rated power (kW)	20
Max. AC power (kVA)	22
Max. output current (A)	33,3
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 (%)	98.6
EU efficiency (%)	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 (> 45 derating)
Self-consumption at night (W)	< 1
Topology	transformerless
Type of protection (IEC 60529)	IP65
Allowable rel. air humidity range (%)	0 ... 100
Max. operating latitude (m above sea level)	4000
Noise level (dBA)	< 60
Weight (kg)	36
Cooling	Active
Dimension (H x W x D) (mm)	480 x 585 x 220
Display	LCD

Certification

EN 61000-6-1, EN 61000-6-3, EN 61000-3-11, EN 61000-3-12 IEC 62109-1 / 2, VDE-AR-N 4105, VDE-AR-N 4110, EN50549-1

Warranty

10 years