

# REFUSOL 20K-2T

New flexibility meets compatibility

SUITABLE FOR  
REPOWERING  
APPLICATIONS

- Two MPP trackers
- Lightweight design
- Compatible with legacy REFU*sol* inverters

The completely new REFU*sol* inverter is developed for a maximum of flexibility in commercial and industrial PV systems.

With two MPP trackers, each system design can be realized, including different orientations and tilts. Compact dimensions paired with a high power density per weight gives more installation location flexibility – on the rooftop or on ground mounted systems. It fits to any mid-size project.

Each inverter can be individually connected to the REFUlog portal for remote monitoring, configuration and updates. Portal comes for free with each inverter during the warranty period of 5 years. For easy integration into a local network, an Ethernet or WiFi stick is available.



Art. No.

**REFU 20K-2T**  
**853P020.200**

**DC DATA**

Max. recommended PV power (kWp)	30
Max. input voltage (V)	1.100
Rated input voltage (V)	650
Start-up input voltage (V)	160
Operating input voltage range (V)	140 - 1000
Rated power MPPT voltage range (V)	480 - 850
Number of independent MPPT	2
Number of DC inputs	2 / 2
Max. current per MPPT (A)	26
Max. short circuit current (A)	36 / 36
Max. power per MPPT input (kW)	15
DC connection	Stäubli MC4

**AC DATA**

Rated power (kW)	20
Max. AC power (kVA)	22
Nominal grid voltage (V)	3/N/PE: 220/380, 230/400
Nominal grid frequency (Hz)	50, 60
Max. output current (A)	31,9
Total harmonic distortion (THDi) (%)	<3
Adjustable power factor range	0.8 inductive ... 0.8 capacitive
AC connection	ring cable lugs (M6)

**PERFORMANCE**

Max. efficiency (%)	98,6
Weighted efficiency (EU/CEC) (%)	98,2
MPPT efficiency (%)	> 99.9

**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
Output inrush current (A)	45

**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)	< 40
Weight (kg)	22
Cooling	Fan
Dimension (H x W x D) (mm)	520 x 430 x 189
Display	LCD
Certification	EN 61000-6-1, EN 61000-6-3, EN 61000-3-11, EN 61000-3-12, IEC 62109-1 / 2, IEC62116, IEC 61727, IEC61683, IEC 60068 (1, 2, 14, 30) VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21 / CEI 0-16, UNE 206 007-1, EN 50549, G98 / G99, EN 50530
Warranty	5 years

No responsibility is taken for the correctness of this information. Subject to modification.