

## REFU*sol* 110/125K-10T

For flexible and grid-compliant PV systems

The REFU*sol* 110/125K-10T is an inverter for C&I and utility-scale PV plants. It combines high efficiency with grid-compliant operation and integration into monitoring systems.



**PID recovery reduces power losses**



**100% power output at 45 °C**



**10 MPPTs for optimal yields in complex plant layouts**



**150% DC/AC ratio for optimization of system costs**



The REFU*sol* 110/125K-10T is a string inverter for rooftop and ground-mounted PV systems in the C&I and utility sectors. It combines high efficiency with grid-compliant operation and stable grid support. Integration into monitoring systems enables central monitoring and control of the plant. The flexible design and robust construction allow for various system configurations.



### System Flexibility & Plant Design

- 10 MPPTs for optimal yields in complex plant layouts
- Suitable for different system orientations and configurations
- 150% DC/AC ratio for optimization of system costs



### Installation & System Integration

- Suitable for rooftop and ground-mounted systems
- Integration into existing and new PV systems
- Simple commissioning and system integration



### Reliability & Operation

- IP66 protection for demanding environments
- Optimized cooling system for stable operating conditions
- Technical support from Germany

# TECHNICAL DATA

Art. No.	REFUso1 110K-10T 854P110	REFUso1 125K-10T 854P125
<b>DC DATA</b>		
Max. recommended PV power (kWp)	150	165
Max. input voltage (V)		1100
Rated input voltage (V)		625
Start-up input voltage (V)		200
Operating voltage range (V)		180 – 1000
MPPT voltage range (V)		500 – 890
Number of independent MPPT(s)		10
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
<b>AC DATA</b>		
Rated power (kW)	100	110
Max. AC power (kVA)	110 @ 45°C / 100 @ 50°C	125 @ 45°C / 110 @ 50°C
Max. output current (A) at 380V / 400V / 415V	167.2 / 159.5 / 153.1	190 / 181.2 / 174
Nominal grid voltage (V)		3P/N/PE: 380V / 400V / 415V
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) (%)		<1 (@ 100% power)
Adjustable power factor range		1 (0.8 inductive ... 0.8 capacitive)
AC connection		AC terminal blocks
<b>PERFORMANCE</b>		
Max. efficiency (%)		98.6
EU efficiency (%)		98.3
<b>PROTECTION</b>		
DC switch		Integrated
Safety protection		Anti-islanding, DC reverse polarity, leakage current, ground fault monitoring, PV array string fault monitoring, RCMU, over temperature, over voltage, over current
String monitoring		each MPPT
Protection class / Over voltage category		Class I / DC: OCV II ; AC: OCV III
SPD		DC: Type II / AC: Type II
AFCI / PID recovery		Yes / yes
<b>COMMUNICATION</b>		
RS485 / USB		yes / yes
<b>GENERAL DATA</b>		
Ambient temperature (°C)		-30 ... +60
Self-consumption at night (W)		<3
Topology		transformerless
Type of protection		IP66
Permissible RH range (%)		0 ... 100
Max. operating latitude (m above sea level)		4000 (derating above 3000)
Weight (kg)		75
Cooling		Active
Dimensions (H x W x D) (mm)		695 x 970 x 325
Certification		EN/IEC 61000-6-1/2/3/4, EN 61000-3-11/12, EN 300 328 V2.2.2, EN 301 489-1 V2.2.3, EN 301 489-17 V3.2.4, EN 62479, EN 50549-1/2, EN/IEC 62109-1/2, IEC 62116, IEC 61727, IEC 61683, IEC 60068-2(1/2/14/30), VDE 0126-1-1, VDE-AR-N 4105, VDE-AR-N 4110
Display		LCD / BLE / App
Warranty		10 years