

20KW THREE PHASE HYBRID INVERTER

FEATURES

-  High efficiency
-  Support multiple inverters in parallel
-  Fast and dynamic MPPT
-  Intelligent EMS function can use solar power 24/7 and lower you energy bills
-  IP65 Protection
-  10 years standard warranty
-  Remote upgrade



STEALTH ENERGY
THE AFFORDABLE ENERGY THAT STANDS BY YOU

Product parameters

Input(DC)	ST-INV-T12.0	ST-INV-T15.0	ST-INV-T18.0	ST-INV-T20.0
Max. PV power [W]	18000	22500	27000	30000
Max. DC input voltage [V]	1000	1000	1000	1000
Nominal DC voltage [V]	620	620	620	620
Max. input current [A]	20/20	20/20	20/20	20/20
Max. short circuit current [A]	27/27	27/27	27/27	27/27
MPPT voltage range [V]	200~850	200~850	200~850	200~850
Start-up voltage [V]	200	200	200	200
Number of MPPTs	3	3	3	3

Input(AC)	ST-INV-T12.0	ST-INV-T15.0	ST-INV-T18.0	ST-INV-T20.0
Max. AC power [VA]	18000	22500	27000	30000
Max. AC current [A]	27	33	39	45
Nominal grid voltage [V]	400/230;380/220	400/230;380/220	400/230;380/220	400/230;380/220
Nominal grid frequency [Hz]	50/60	50/60	50/60	50/60

Output(AC)	ST-INV-T12.0	ST-INV-T15.0	ST-INV-T18.0	ST-INV-T20.0
Nominal output power [VA]	12000	15000	18000	20000
Nominal grid voltage [V]	400/230;380/220	400/230;380/220	400/230;380/220	400/230;380/220
Nominal grid frequency [Hz]	50/60	50/60	50/60	50/60
Max. AC current [A]	18	22	27	30
Power factor	0.8 leading~0.8 lagging	0.8 leading~0.8 lagging	0.8 leading~0.8 lagging	0.8 leading~0.8 lagging
THDi [%]	<3	<3	<3	<3

EPS Output (with battery)	ST-INV-T12.0	ST-INV-T15.0	ST-INV-T18.0	ST-INV-T20.0
EPS Max. power [VA]	12000	15000	18000	20000
EPS nominal voltage [V]	400/230;380/220	400/230;380/220	400/230;380/220	400/230;380/220
EPS nominal frequency [Hz]	50/60	50/60	50/60	50/60
EPS Max. current [A]	18	22	27	30
THDv [%]	<3	<3	<3	<3

Efficiency	
MPPT efficiency [%]	99
European efficiency [%]	97
Max. efficiency [%]	97.8
Battery charge and discharge efficiency [%]	97.5/96.5

Protection	
DC insulation resistance detection	
Residual current monitoring	
Anti-islanding protection	
AC output over current protection	
AC short circuit protection	
Grid monitoring	

Environmental Limit	
Ingress protection	IP65
Operating temperature range [°C]	-25~60 (derating at >45)
Altitude [m]	<2000
Relative humidity range [%]	0~100
Storage temperature [°C]	-25~60
NI [dB]	<50

Battery	
Battery type	LFP
Battery voltage range [V]	180-700
Max.charge/discharge current [A]	40
Communication interface	CAN

Standard and Certification	
Safety	IEC62109-1, IEC62109-1-2
EMC	IEC61000-6-2, IEC61000-6-3
Grid regulation	VDE-AR-N 4105, EN50549-1, CEI 0-21 UNE217002, NTS, RD647, RD413, RD1699 NL, SE, CZ ...

General Data	
Dimensions (W*H*D) [mm]	650*510*220
Weight [kg]	40
Cooling Method	Smart fan cooling
Topology	Non-isolated
Interfaces	Meter/ WiFi/ DRM/ BMS
Night power consumption [W]	<30
Warranty	10 years