



NovaPlus

DATA SHEET

THREE-PHASE HIGH-VOLTAGE HYBRID INVERTER

PHI-100~150K-TH-US-H

Three-Phase · High Voltage · 100 kW – 150 kW



10+
YEARS
WARRANTY



150 kW

MAX. POWER

<10 ms

SWITCHOVER

99.9%

MPPT EFF.

IP66

PROTECTION

Model	PHI-100K-TH-US-H	PHI-125K-TH-US-H	PHI-150K-TH-US-H
DC Input (PV Side)			
Max. PV access power	200kW	250kW	250kW
Max. PV input power	160kW	200kW	240kW
Max. PV input voltage	1000V		
Start-up voltage	200V		
MPPT operating voltage range	180V–850V		
Nominal input voltage	600V		
No. of indep. MPPT / strings per MPPT	8/3		
Max. MPPT current	8×45A		
AC Output/Input (Grid Side)			
Nominal apparent power	100kW	125kW	150kW
Max. apparent power	100kVA	125kVA	150kVA
Nominal current	120.3A	150.4A	180.4A
Max. current	120.3A	150.4A	180.4A
Max. AC current from grid	300A		
Power factor	–0.8~+0.8 (adjustable)		
THDi	<3% (rated output)		
Grid system	Three-phase		
Nominal frequency and voltage	50Hz/60Hz, 3L/N/PE, 277/480V		
AC Output (Backup)			
Nominal apparent power	100kW	125kW	150kW
Output frequency and voltage	50Hz/60Hz, 3L/N/PE, 277/480V		
Output THDV	<3%		
Automatic switchover time	<10ms		
Battery Input Data			
Battery type	Li-ion		
Battery voltage range	200V–800V		
Max. charge/discharge current	2*100A/2*100A		
Li-Ion charging strategy	Self-adapting to BMS		
Features		Interface & Control	
Max. MPPT efficiency	99.9%	Display	Color touchscreen
Protection degree	IP66	Monitoring	Smart Wi-Fi
Unbalanced output	100% per phase	GEN port	Generator / AC couple
Functions & General Data			
Operating modes	On-grid + Storage + Off-grid	Parallel	Up to 10 units (on/off-grid)
Peak shaving	Grid optimization	Flexible three-phase output	277/480V

 Smart storage and flexible operation

IP66 · Smart Energy Storage