



NovaPlus

DATASHEET

THREE-PHASE HIGH-VOLTAGE HYBRID INVERTER

PHI-10~15K-TH-US

Three-Phase · High Voltage · 10 kW – 15 kW



15 Kw

MAX. POWER

<10 ms

SWITCHOVER

99.9%

MPPT EFF.

IP66

PROTECTION

Technical Specifications

Models PHI-10K · 12K · 15K–TH–US

PHI-10~15K-TH-US · Hybrid Inverter · Three-Phase High Voltage · NovaPlus

Model	PHI-10K-TH-US		PHI-12K-TH-US	PHI-15K-TH-US
DC Input (PV Side)				
Max. PV access power	16kW		20kW	24kW
Max. PV input power	16kW		20kW	24kW
Max. PV input voltage			1000V	
Start-up voltage			200V	
MPPT operating voltage range			180V–850V	
PV voltage range at full power			150V–750V	
No. indep. MPPT / strings per MPPT			2/2	
Max. MPPT current			30A / 30A	
AC Output/Input (Grid Side)				
Rated apparent power	10kW		12kW	15kW
Max. apparent power	11kVA		13.2kVA	16.5kVA
Rated current	27.8A/26.2A		33.3A/31.5A	41.6A/39.3A
Max. current	30A		35A	45A
Max. AC current from grid	30A		35A	45A
Power factor			–0.8~+0.8 (adjustable)	
THDi			<3% (rated output)	
Grid system			Three-phase	
Rated frequency and voltage			50Hz/60Hz, 3L/N/PE, 120/208V, 127/220V	
AC Output (Backup)				
Rated apparent power	10kW		12kW	15kW
Output frequency and voltage			50Hz/60Hz, 3L/N/PE, 120/208V, 127/220V	
Output THDV			<3%	
Automatic switchover time			<10ms	
Battery Input Data				
Battery type			Li-ion	
Battery voltage range			150V–750V	
Max. charge/discharge current			50A	
Li-Ion charging strategy			Self-adaptation to BMS	
Features		Interface and 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 and 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		120/208V · 127/220V

 **Smart storage and flexible operation**

IP66 · Smart Energy Storage