



## Three Phase Hybrid Inverter Datasheet

Omnis T-5000HV  
Omnis T-6000HV  
Omnis T-8000HV  
Omnis T-10000HV  
Omnis T-12000HV

### Description

The Omnis T Series is a high-performance three-phase hybrid inverter with excellent reliability, including power class from 5 kW to 12 kW.

The intelligent EMS function supports self-consumption mode, economic mode, and backup mode for multi-scenario applications.

Module-level monitoring management through Omnis Power Cloud allows users to remotely diagnose and track individual modules' performance over time, offering superior energy production.

### Features

- 01 Max. Efficiency 97.6%, European Efficiency 97.0%
- 02 Double MPPT tracker, up to 14A MPPT current
- 03 DC/AC ratio up to 150%
- 04 Built-in dry contact flexibly monitors earth fault alarm and provides load control or generator control

- 05 Ultralight for easy installation and space-saving
- 06 Support both DC-coupled and AC-coupled system
- 07 Remote monitoring through Omnis Power Cloud
- 08 EMS integrates with self-consumption, economic mode and backup mode, offering multi-scenario solutions for daily life.

# Technical Specifications

Model	Omins T-5000HV	Omnis T-6000HV	Omnis T-8000HV	Omnis T-10000HV	Omnis T-12000HV
<b>Battery</b>					
Battery Type	Li-ion				
Rated Battery Voltage (V)	500				
Voltage Range (V)	170-600				
Max. Charge Current (A)	20	20	30	30	30
Max. Discharge Current (A)	20	20	30	30	30
Rated Power (W)	5000	6000	8000	10000	10000
Charging Strategy	Self-adaption to BMS				
<b>PV Input</b>					
Max. PV Input Power (W)	7500	9000	12000	15000	15000
Max. PV Input Voltage (V)	1000				
Nominal Input Voltage (V)	720				
MPPT Voltage Range (V)	200-950				
Start-up Voltage (V)	250				
Number of MPPTs	2	2	2	2	2
Max. Number of PV String per MPPT	1/1	1/1	1/1	1/2	1/2
Max. PV Input Current (A)	14/14	14/14	14/14	14/28	14/28
Short-circuit Current of PV Input (A)	17/17	17/17	17/17	17/34	17/34
<b>AC Input and Output (On-grid)</b>					
Nominal Output Apparent Power (VA)	5000	6000	8000	10000	12000
Max. Output Apparent Power (VA)	5500	6600	8800	11000	12000
Max. Input Apparent Power (VA)	10000	12000	16000	16000	16000
Nominal AC Voltage (V)	400/380, 3L/N/PE				
Nominal Grid Frequency (Hz)	50/60				
Max. Output Current (A)	8.3	10.0	13.3	16.7	17.4
Max. Input Current (A)	15.2	18.2	24.2	24.2	24.2
Power Factor	leading 0.8 ... lagging 0.8				
Total Harmonic Distortion (@ nominal output)	<3%				
<b>AC Output (Off-grid)</b>					
Max. Output Apparent Power (VA)	5000	6000	8000	10000	12000
Peak Output Apparent Power (VA)	10000, 10s	12000, 10s	16000, 10s	16000, 10s	16000, 10s
Nominal AC Voltage (V)	400/380, 3L/N/PE				
Nominal AC Frequency (Hz)	50/60				
Max. Output Current (A)	8.3	10.0	13.3	16.7	17.4
Total Harmonic Distortion (@ linear load)	<3%				

# Technical Specifications

Model	Omins T-5000HV	Omnis T-6000HV	Omnis T-8000HV	Omnis T-10000HV	Omnis T-12000HV
<b>Efficiency</b>					
Max. Efficiency	97.6%	97.6%	97.6%	97.6%	97.6%
Euro Efficiency	97.0%	97.0%	97.0%	97.0%	97.0%
Max. Battery to Load Efficiency	97.0%	97.0%	97.0%	97.0%	97.0%
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%	99.9%
<b>Protection</b>					
Anti-islanding Protection				Integrated	
PV String Input Reverse Polarity Protection				Integrated	
Insulation Resistor Detection				Integrated	
Residual Current Monitoring Unit				Integrated	
AC Over Current Protection				Integrated	
AC Short Current Protection				Integrated	
AC Over-voltage and Under-voltage Protection				Integrated	
Surge Protection				DC Type II / AC Type III	
<b>General</b>					
Dimension (W × H × D) [mm]				502 × 486 × 202	
Weight (kg)				26	
Mounting				Wall Mounting	
Operation Temperature (°C)				-25 to + 65 (>45, derating)	
Relative Humidity				0-95%, no condensing	
Altitude (m)				≤ 4000	
Cooling				Natural convection	
Protection Degree				IP65	
Noise (dB [A])				<40	
User Interface				LED & APP	
Communication with BMS				RS485, CAN	
Communication with Meter				RS485	
Communication Interface				RS485, Wi-Fi/WLAN/GPRS (optional)	
Digital Input/output				DRM, 1 ×DI, 2 ×DO	
Isolation Method (Solar/Battery)				Transformerless / Transformerless	
<b>Certifications and Standards</b>					
Grid Regulation				EN 50549, VDE-AR-N 4105, AS/NZS 4777.2	
Safety Regulation				IEC 62109-1, IEC 62109-2	
EMC				EN 61000-6-1, EN 61000-6-3	