UNO HYBRID N SERIES SINGLE PHASE INVERTER

TOMMATECH GmbH
GERMAN-based company



Single Phase Hybrid Inverter

Uno Hybrid N Series

3.6 / 5.0 / 6.0 / 7.0 / 7.6 / 8.0

Simple. Reliable. Efficient.

- High Efficiency
- AC Coupling
- Wide Voltage Range
- Up to 16 Parallel Units
- 190A Charge/Discharge
- IP65 Protection



12kW 14kW

Uno-Hybrid-LV-N-3.6-5P / Uno-Hybrid-LV-N-5-5P / Uno-Hybrid-LV-N-6-5P / Uno-Hybrid-LV-N-7-5P / Uno-Hybrid-LV-N-7.6-5P / Uno-Hybrid-LV-N-8-5P

The Uno Hybrid N Series is a flexible, high-performance, low-voltage hybrid inverter solution designed for both new installations and upgrades to existing solar energy systems. With an IP65 protection rating, it delivers reliable performance under a variety of environmental conditions. The inverter supports AC coupling for retrofitting (integration into existing systems) and enables up to 16 units to operate in parallel in both grid-connected (on-grid) and off-grid scenarios. With a maximum charge/discharge current of 190A and support for multiple battery configurations, it offers powerful and efficient energy management. Additionally, by enabling energy storage from diesel generators, it provides an ideal solution for hybrid energy systems that require high reliability.

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PV String Input Data	UNO-HYB-LV-N3.6K-5P	UNO-HYB-LV-N5K-5P	UNO-HYB-LV-N6K-5P	UNO-HYB-LV-N7K-5P	UNO-HYB-LV-N7.6K-5P	UNO-HYB-LV-N8K-5P
Max. PV Access Power (W)	7200	10000	12000	14000	15200	16000
Max. PV Input Power (W)	5760	8000	9600	11200	12160	12800
Max. PV Input Voltage (V)	500					
Start-up Voltage (V)	125					
MPPT Voltage Range (V)	150-425					
Rated PV Input Voltage (V)	370					
Max. Operating PV Input Current (A)	18+18			32+32		
Max. Input Short-Circuit Current (A)	27+27			48+48		
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1			2/2+2		
AC Input/Output Data						
Rated AC Input/Output Active Power (W)	3600	5000	6000	7000	7600	8000
Max. AC Input/Output Apparent Power (VA)	3960	5500	6600	7700	8360	8800
Rated AC Input/Output Current (A)	16.4/15.7	22.8/21.8	27.3/26.1	31.9/30.5	34.6/33	36.4/34.8
Max. AC Input/Output Current (A)	18/17.3	25/24	30/28.7	35/33.5	38/36.4	40/38.3
Max. Continuous AC Passthrough (grid to load) (A)	35		40		50	
Peak Power (off-grid) (W)	2 times of rated power, 10s					
Power Factor Adjustment Range	0.8 leading to 0.8 lagging					
Rated input/output voltage	220/230V 0.85Un-1.1Un L+N+PE					
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65					
Total Current Harmonic Distortion THDi	<3% (of nominal power)					
DC Injection Current	<0.5% In					
Battery Input Data						
Battery Type	Lead-acid or Lithium-ion					
Battery Voltage Range (V)	40-60					
Max. Charging Current (A)	90	120	135	175	190	190
Max Discharging Current (A)	90	120	135	175	190	190
Charging Strategy for Li-ion Battery	Self-adaption to BMS					
Number of Battery Input	1					
Efficiency						
Max. Efficiency	97.6%					
Euro Efficiency	96.5%					
MPPT Efficiency	>99%					
Equipment Protection						
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level					
Surge Protection Level	Tip II(DC), TİP II(AC)					
Interface						
Communication Interface	RS485/RS232/CAN					
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN (optional)					
General Data						
Operating Temperature Range (℃)	-40 to +60˚C, >45˚C Derating					
Permissible Ambient Humidity	0-100%					
Permissible Altitude	2000m					
Noise (dB)	<30					
Ingress Protection(IP) Rating	IP 65					
Inverter Topology	Non-Isolated					
Over Voltage Category	OVC II(DC), OVC III(AC					
Cabinet Size (WxHxD mm)	366x589.5x237 (Excluding Connectors and Brackets)					
Weight (kg)	26.8					
Type of Cooling	Intelligent Air Cooling					
Warranty	5 Years					
Grid Regulation	IEC 61727, IEC 62116, IEC 61683, IEC 60068-2-1/2/14/30, EN 50549					
Safety / EMC Standard	EN IEC 61000-6-1/2/3/4, EN IEC 61000-3-2/11,EN 61000-3-3/12, EN 55011, EN 62109-1/2 Low Voltage Directive EU 2014/35					

* TommaTech GmbH reserves the right to change the specifications of the products without prior notice.

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