UNO HYBRID N PRO SERIES SINGLE PHASE INVERTER

TOMMATECH GmbH
GERMAN-based company





Single Phase Hybrid Inverter

Uno Hybrid N Pro Series

3.0 / 3.6 / 4.0 / 4.6 / 5.0 / 6.0

Simple. Reliable. Efficient.

- High Efficiency
- AC Coupling
- Wide Voltage Range
- Up to 16 Parallel Units
- 135A Max. Charge/Discharge Current
- IP65 Protection



3.0kW 3.6kW

UNO-HYB-LV-N3K-6-24/ UNO-HYB-LV-N3K-6/ UNO-HYB-LV-N3.6K-6
UNO-HYB-LV-N4K-6/ UNO-HYB-LV-N4.6K-6/ UNO-HYB-LV-N5K-6
UNO-HYB-LV-N6K-6

The Uno Hybrid N Pro 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 135A 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 requiring high reliability.

TommaTech GmbH - Garching b. München / GERMANY

www.tommatech.de
mail@tommatech.de

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PV String Input Data	UNO-HYB-LV-N3K-6-24	UNO-HYB-LV-N3K-6	UNO-HYB-LV-N3.6K-6	UNO-HYB-LV-N4K-6	UNO-HYB-LV-N4.6K-6	UNO-HYB-LV-N5K-6	UNO-HYB-LV-N6K-6
Max. PV Access Power (W)	6000	6000	7200	8000	9200	10000	12000
Max. PV Input Power (W)	4800	4800	5760	6400	7360	8000	9600
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+18				
Max. Input Short-Circuit Current (A)	27		27+27				
No. of MPP Trackers/ No. of Strings MPP Tracker	1/1		2/1+1				
AC Input/Output Data							
Rated AC Input/Output Active Power (W)	3000	3000	3600	4000	5000	5000	6000
Max. AC Input/Output Apparent Power (VA)	3300	3300	3960	4400	5500	5500	6600
Rated AC Input/Output Current (A)	13.7/13.1	13.7/13.1	16.4/15.7	18.2/17.4	22.8/21.8	22.8/21.8	27.3/26.1
Max. AC Input/Output Current (A)	15/14.4	15/14.4	18/17.3	20/19.2	25.0/24.0	25/24.0	30/28.7
Max. Continuous AC Passthrough (grid to load) (A)	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)	20-30	40-60					
Max. Charging Current (A)	140	70	90	95	120	120	135
Max Discharging Current (A)	Self-adaption to BMS						
Charging Strategy for Li-ion Battery	1						
Number of Battery Input							
Efficiency	97.6%						
Max. Efficiency	96.5%						
Euro Efficiency	>99%						
MPPT Efficiency							
Equipment Protection Integrated	DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (AFCI)(optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection						
Surge Protection Level	TYPE II(DC), TYPE II(AC)						
Interface							
Communication Interface	WIFI, RS485, CAN						
Monitor Mode	LCD						
General Data							
Operating Temperature Range (℃)	-40 to +60˚C , >45˚C Derating						
Permissible Ambient Humidity	0-100%						
Permissible Altitude	3000m						
Noise (dB)	<45						
Ingress Protection(IP) Rating	IP 65						
Inverter Topology	Non-Isolated (solar), Isolated (battery)						
Over Voltage Category	OVC II(DC), OVC III(AC)						
Cabinet Size (WxHxD mm)	310x460x218 (Excluding Connectors and Brackets)						
Weight (kg)	15.6						
Type of Cooling	Natural Cooling						
Warranty	5 Years						
Grid Regulation	IEC 61727, IEC 62116, EN 50549, VDE-AR-4105						
Safety / EMC Standard	EN IEC 61000-6-1/2/3/4, EN IEC 62109-1, IEC/EN 62109-2						

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

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