



Hybrid Three-Phase High Voltage Inverter

NEUSYNC UH (30 / 40 / 50kW)

The Acelion NEUSYNC UH Series (30–50 kW) is a high-capacity hybrid inverter built for commercial, industrial, and large-scale solar energy systems. Powered by SiC technology with up to 98% efficiency, this series delivers robust, intelligent, and scalable performance. It integrates multi-MPPT architecture, dual battery compatibility, and high overload tolerance, ensuring maximum uptime, adaptability, and energy optimisation.



SiC Technology, Max.
Efficiency 98%



2 Independent Battery Ports for
Mixture Use of Old & New Battery



275%-626% Grid Input Power,
200A Grid Input Current
Supplying to Loads & Charging
Battery



6 Units in Parallel
(Off-grid Mode)



Battery Current 160A, High
Adaptability with Battery



50% Overload, AFCI Function
(Optional)



150%-200% PV Input Power,
3–4 MPPTs, PV Input Current
40A, Higher Compatibility
with PV Panel



Smaller Size, Easier for Installa-
tion and Price-wise in Shipping



Executive Generator Port, Smart
Monitoring Max. Generator Input
Current 200A

Parameter	30 kW	40 kW	50 kW
Off-grid Output			
Rated Output Power	30 kW	40 kW	50 kW
Max. Apparent Power	33 kVA	44 kVA	55 kVA
Rated Voltage	3L/N/PE, 220/380 V; 230/400 V		
Rated Frequency	50 Hz / 60 Hz		
Rated Output Current	43.5 A	58 A	72.5 A
Max. Output Current	47.9 A	63.8 A	79.8 A
Peak Power & Duration	150 % (10 s)		
Generator Input Current	150 A		
THDu	< 3 %		
On-grid Parameter			
Rated Output Power	30 kW	40 kW	50 kW
Rated Grid Voltage	3L/N/PE, 220/380 V; 230/400 V		
Rated Grid Frequency	50 Hz / 60 Hz		
Rated Output Current	43.5 A	58 A	72.5 A
Grid Input Current	150 A		
PV Input			
Max. DC Input Power	75 000 Wp		
Max. Input Voltage	1000 V		
Rated Input Voltage	600 V		
Starting Voltage	180 V		
MPPT Voltage Range	150 - 850 V		
Max. Input String per MPPT	4 / 8		
Max. DC Input Current	4 × 40 A		
Short-circuit Current	4 × 60 A		
Battery Parameter			
Battery Type	Lithium-ion		
Battery Voltage Range	30 kW	40 kW	50 kW
Max. Charging/Discharging Power	30 kW		
Max. Charging/Discharging Current	80 A × 2		
Number of Battery Input Ports	2		
Efficiency			
Max. Efficiency	98.6 %		
European Efficiency / CEC Efficiency	97.97 %		
European Efficiency / CEC Efficiency	98 %		
General Data			
Size (W×H×D)	850 mm × 550 mm × 295 mm		
Weight	88 kg		
Noise	55 dB		
Topology	Isolated		
Operating Temperature	-25 °C ~ +60 °C		
Operating Altitude	4000 m (> 3000 m Derating)		
Humidity Range	0 - 100 %		
Ingress Protection Grade	IP66		
Cooling Method	Intelligent Air Cooling/intelligent Air Cooling		
Monitoring	Google Home, Apple Home Kit, BLE/Isolated		
Communication Port	RS485, CAN, WIFI, 4G, DRM, IO, BLE		
DC Power	12 VDC 2A		
Protection			
DC Switch, Reverse Polarity, AC Overvoltage/Overcurrent, Short Circuit, Anti-Islanding, Residual Current Monitoring, Isolation Resistance Detection, Surge Protection, AC Type II Arrester, AFCI (Optional), PID (Optional)			
Certifications			
IS/IEC 61683:1999, IS 16221(Part-2):2015, IS 16169:2019, IEC 61727:2004, IEC 61000-6-1(1,2,3,4), IEC 60068-2-1(1,2,14,30)			