Gietron
Engineering the Future of Energy

SPH 8000TL-HU-US
SPH 10000TL-HU-US

Split-Phase Hybrid (SPH) Inverter

Gietron's Split-Phase Hybrid (SPH) Inverter, powered by Growatt, is the energy heart of a modern Canadian home or business. The SPH inverter intelligently directs power flow between solar panels, battery storage, the grid, and even a backup generator. When the SPH inverter is paired with stackable 48 V batteries, storage capacity can scale to match each home, from essential-load backup to whole-home coverage. And when the grid goes down, the SPH inverter can switch to battery power in under 10 milliseconds.



- Three Independent MPPTs
- 8kW and 10kW (120/240V) options
- <10ms backup power transfer
- Up to 200A battery current
- Scalable by design
- Indoor or outdoor installation (IP65)
- Built-in breakers & surge protection
- 10-year warranty

Designed around Smart Energy Management
Every SPH connects via built-in WiFi to a free monitoring platform, giving system owners real-time visibility into solar production, battery state of charge, and energy flows. Time-of-use scheduling lets homeowners charge from solar or off-peak grid power and discharge during expensive peak windows. Installers and service teams benefit from remote diagnostics and over-the-air firmware updates.

Gietron is a brand owned by Gwatt Innovations Ltd.

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Gietron Powered by GROWATT

Proudly Canadian Owned & Operated

Specifications	SPH 8000TL-HU-US	SPH 10000TL-HU-US
PV Input data (DC)		
Maximum recommended PV power (per MPPT)	15kW (10kW)	
Maximum input DC voltage	525V	
Start-up voltage	130V	
MPP voltage range	150V-450V	
Number of MPPTs	3	
Number of PV strings per MPPT	2	
Maximum input current per MPPT	22A	
Maximum short-circuit current per MPPT	27A	
Battery data (DC)		
Battery voltage range (nominal)	40V-60V (48V)	
Maximum charging/discharging current	190A	200A
Continuous charging/discharging power limit	8kW	10kW
Communication protocol	CAN/RS485	
Acceptable battery types	Lithium-ion or lead-acid	
Input data (AC)		
Nominal AC input power	8kW	10kW
Nominal input voltage	240V	
Nominal input current	33.33A	41.67A
Maximum grid passthrough curent	62.5A	
Maximum generator input power	8kW	10kW
Output data (AC)		
AC nominal power	8kW	10kW
Maximum AC apparent power	8kVA	10kVA
Nominal AC voltage (range)	120V/240V Split (180Vac - 280Vac)	
AC grid frequency	60Hz	
Maximum output current	40A	50A
Adjustible power factor	0.8 leading - 0.8 lagging	
Total harmonic distortion of current (THDi)	<3%	
AC grid connection type	L1/L2/N/PE	
Backup power (AC)		
Transfer time	<10ms	
Temporary overload capability	12kW (<5s)	15kW (<5s)
Efficiency		
Peak efficiency	98.1%	
CEC weighted efficiency	97%	
MPPT efficiency	≥99.9%	
Protection devices		
PV switch, AC overcurrent protection, AC overvoltage protection, ground fault monitoring, grid monitoring, anti-islanding protection, residual-current monitoring unit, insulation resistance monitoring, AFCI protection, DC type II surge protection, and AC type II surge protection		
General data		
Maximum number of stackable units	6	
Dimensions (H x W x D)	874mm x 457mm x 256mm	
Weight	42.5kg	
Operating temperature range	-25°C to +60°C with derating above 45°C	
Typical noise emission	≤ 60 dB(A)	
RSD transmitter	Tigo/APsmart	
Built-in breaker specifications	BAT side: 80V/250A, Grid side: 400V/100A, GEN side: 400V/63A, LOAD side: 400V/100A	
Self-consumption	<60W	
Inverter topology	Transformerless	
Cooling	Smart cooling	
Protection degree	IP65 / NEMA 4	
Relative humidity	0-100%	
Maximum operating altitude	2000m	
Display	LCD	
Communication	WiFi (4G cellular is optional)	
Warranty	10 years	
Certifications		
UL 1741(SA/SB/CRD), UL 1699B, ULIEEE 1547, CSA C22.2, CSA C22.3, IP65		