

Taiga 208V Hybrid Inverter

The **Taiga 208V Hybrid Inverter** supports 208V three-phase grid connections. **Multiple independent MPPTs** handle and support unbalanced 3-phase loads, continuous PV overload, black-start capabilities, and integrates with batteries. **Up to 2.0x DC/AC ratio** lets you size the PV field freely. Scales up to **6 units in parallel** of backup-ready capacity.



- **Four power tiers: 28, 35, 40, and 55kW**
- **Multiple MPPTs, 2.0 DC/AC ratio**
- **Scalable system configuration, up to 6 units in parallel**
- **Supports UPS function and black start**
- **Fully unbalanced load capabilities during backup power operation**
- **110% continuous AC overloading capacity**
- **Grid-support functions**

Built for the Canadian Climate

98% peak efficiency. 110% continuous AC overload. 380–650V battery window, compatible with most commercial lithium systems on the market. **IP66** rated for outdoor rooftops. Operates in **-30°C to 60°C conditions**. Built-in **PID recovery, AFCI, and fuse-free design** to reduce the system running cost and O&M services.

Gietron is a brand owned by Gwatt Innovations Ltd.



Specifications	CH-28KW-208V	CH-35KW-208V	CH-40KW-208V	CH-55KW-208V
Input Data (PV)				
Maximum recommended PV power	54kW	75.6kW	86.4kW	108kW
Minimum start-up voltage	195V			
Maximum input voltage*	800V			
MPPT nominal voltage (range)	360V (180V-550V)			
Maximum input current per MPPT	32A			
Maximum short-circuit current per MPPT	40A			
No. of PV strings per MPPT	2			
Number of MPPTs	5	7	8	10
Output Data (AC)				
Nominal AC power	28kW	35kW	40kW	55kW
Maximum AC apparent power	30.8kVA	38.5kVA	44kVA	60.5kVA
Nominal AC voltage (range)	208V (177V-229V)			
AC grid frequency (range)	60Hz (55-65Hz)			
Maximum output current	85.6A	106.9A	122.2A	168.1A
Adjustable power factor	Full range			
Total harmonic distortion of current (THDi)	<3%			
AC grid connection type	3P3W+PE/3P4W+PE			
Input Data (AC)				
Maximum AC apparent power	56kVA	70kVA	80kVA	110kVA
Nominal AC voltage (range)	208V (177V-229V)			
Nominal AC grid frequency (range)	60Hz (55-65Hz)			
Maximum input current	155.6A	194.4A	222.2A	305.6A
Backup Power (AC)				
Nominal AC power	28kW	35kW	40kW	55kW
Maximum AC apparent power	33.6kVA	42kVA	48kVA	66kVA
Maximum single phase power	9.3kW	11.6kW	13.3kW	18.3kW
Nominal AC voltage	Line-to-Neutral: 120V; Line-to-Line: 208V			
Nominal AC frequency	60Hz			
Maximum output current	93.3A	116.7A	133.3A	183.3A
Overload capability	≤110%: Continuous; 110-120%: ≤10min; >120%: ≤200ms			
Unbalanced load capability	100%			
Total harmonic distortion of voltage (THDv)	<3%			
On/off grid transfer time	≤16.6ms			
Battery Data (DC)				
Battery voltage range (recommended)	380V-650V (512V)			
Maximum charging/discharging current	79A	99A	113A	156A
Continuous charging/discharging power	31.7kW	39.7kW	45.3kW	62.3kW
BMS communication	RS485/CAN			
Battery chemistry compatibility	Lithium-ion			
Efficiency				
Maximum efficiency	98.20%			
Protection Devices				
DC reverse polarity protection, Battery reverse protection, Type II AC/DC surge protection, Insulation resistance monitoring, Ground fault monitoring, Grid monitoring, Residual-current monitoring unit, AC short-circuit protection, Strings monitoring, Anti-islanding protection, PID protection, AFCI function				
General				
Dimensions (H x W x D)	1350mm x 850mm x 510mm			
Weight	153kg	153kg	160kg	160kg
Operating temperature range	-30°C to +60°C (derated >50°C)			
Maximum operating altitude	4000m			
Inverter topology	Transformerless			
Cooling	Smart air cooling			
Protection degree	IP66/NEMA 4X			
Display	LED + Mobile app (if WiFi is used)			
Communication interfaces	RS485/CAN (WiFi, 4G, and LAN are optional)			
Certifications				
UL 1741:2021, IEEE 1547:2018, IEEE 1547.1:2020, E-5000, CSIP, IP66, UL 1998:2018, CEC, FCC, CSA C22.2.107.1				
5-year warranty (10-year option available)				

*The maximum open circuit voltage of PV string must be lower than the nominal voltage of the battery system connected to the inverter.
All specifications are subject to change without notice.