

GSE-T Series Power Converter

Isolated Type



Battery Access Management

- ◆ Wide DC voltage operation range, flexible for battery configuration.
- ◆ Constant power charging and discharging control in on-grid operation mode.
- ◆ Charging of constant voltage with limited current in on-grid operation mode.



Safe and Reliable

- ◆ Off-Grid independent operation, V/F control in off-grid operation.
- ◆ Effective forced air cooling, 1.1 overload capacity.
- ◆ Supporting AC side short-circuit operation mode.



Grid Friendly

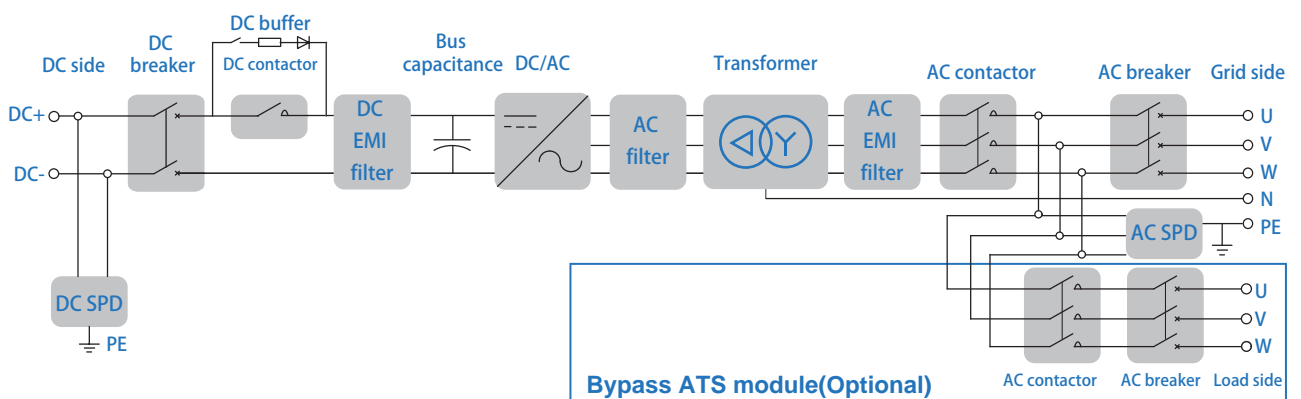
- ◆ Advanced active and passive combined islanding detection technology.
- ◆ Adjusting the active and reactive power following dispatch order in on-grid mode.
- ◆ Stabilizing load voltage and frequency in off - grid mode.



Easy I&M

- ◆ Modular design and components front accessible, easy for maintenance.
- ◆ High reliability power module design of main power loop.
- ◆ Optional for ATS function bypass module.

Circuit Diagram:



Model	GSE0050T	GSE0100T	GSE0150T	GSE0250T	GSE0500T
DC side					
Max. DC voltage	1000V				
DC voltage range for nominal power	400~850Vdc		500~850Vdc		
Max. DC current	142A	283A	340A	565A	1128A
Auto-buffer function	Yes				
AC side (Grid)					
AC output power	50 kW	100 kW	150 kW	250 kW	500 kW
Max. AC power	55 kVA	110 kVA	165 kVA	275 kVA	550 kVA
Nominal AC current /Max. AC current	80A	160A	240A	400A	794A
Nominal AC voltage	400Vac, 3W+N+PE				
AC voltage range	400Vac, (-20%~+15%)				
Nominal grid frequency(Grid frequency range)	50 / 60Hz (±2Hz)				
AC current THD	<3%				
Power factor at nominal power/ Adjustable power factor	>0.99/1 Leading ~ 1 Lagging				
Adjustable reactive power	-100%~100%				
AC side (Off-Grid)					
Nominal AC voltage	400Vac, 3W+N+PE				
AC voltage range	400Vac, (-20%~+15%)				
AC voltage THD	<3%(Linear load)				
Unbalance load capacity	100%				
Over-load capacity	110%~normal operation, 120%~1min				
Efficiency					
Max. efficiency	>96.8%	>97.1%	>97.2%	>97.3%	>97.5%
Protection					
Over voltage protection	DC Type II / AC Type II				
Grid monitoring/Ground fault monitoring/Insulation monitoring	Yes/Yes/Yes				
Overheat protection	Yes				
General Data					
Dimensions (W * D * H)mm	750x700x1850	800x935x2000		1200x935x2000	1600x935x2000
Weight(kg)	550kg	850kg	930kg	930kg	2200kg
Charge and discharge switching time	<40ms				
Ingress protection rating	IP21				
Operating ambient temperature range	-30~+55 °C				
Relative humidity range	0~95% (no condensation)				
Cooling method	Intelligent forced air cooling				
Max. operating altitude	5000m (>3000m derating)				
Display	Touch screen				
Communication	RS485 / CAN 2.0 (to BMS), RS485 / Ethernet (to EMS)				
Grid support	L/HVRT, L/HFRT, active & reactive power control and power ramp rate control				
Isolation method	Transformer				
Bypass ATS module	Optional				No

*If bypass ATS function is selected in the device, the corresponding model suffix is TS.