

Voltage Regulation Device with Energy Storage System

TESS-3-3.6/3-7.2/5-11.52



Product overview

The BESS type terminal voltage regulation device is a product that solves the problem of low voltage at the end of weak grid structures. Compared to traditional solutions, it has flexible operation capabilities, can reduce line power loss and voltage drop through local active support, and can meet various application scenarios. It has features such as small size, high efficiency, and reliability.



Integrated, designed with high protection grade structure



Modular design, easy to repair and maintenance



Reducing the power grid distribution capacity, line transformation



Real-time monitoring, dynamic compensation



solve problems such as equipment idle due to renovation, and low utilization rate



Shortening the renovation period and improving its economic efficiency



Supporting Cloud platform monitor on data



Accurate and point-fixing compensation and quick solution to low voltage problems



Model	TESS-3-3.6	TESS-3-7.2	TESS-5-11.52
Battery end			
Battery Type	Lithium iron phosphate		
Rated battery voltage	48V		
Maximum charging and discharging current	65A	65A	100A
Battery capacity	3.6kWh	7.2kWh	11.52kWh
Grid End			
AC output power	3kW	3kW	5kW
AC output current	13.6A	13.6A	22.7A
Output format	L/N + PE		
AC output voltage	220Vac		
AC voltage range	176-264Vac		
AC output frequency	45~55Hz/55~65Hz		
Power factor	0.99 (advance)~ 0.99 (lag)		
THDI	≤5%		
Maximum efficiency	≥92%		
Others			
Duration for switching between forward and reverse	≤100ms		
Islanding Protection	Equipped		
Cooling method	Forced air cooling		
Protection Grade	IP44		
Over-current/over-voltage protection	Equipped		
Remote online upgrade	Equipped		
Surge protection	Equipped		
Cloud Platform	Support		
Ambient temperature	-5°C~+55°C		
Operating Altitude	≤3000m (over 3000 m, please derate; at 3000 m ~ 5000 m, conduct linear derating to 30%)		
Relative humidity	≤95%RH, non-condensing		
Noise	<65dB		
Installation method	Pole mount/floor mount/frame rod mount		
Communication Interface	RS485/CAN		
Dimensions (W X H X D)	693×752×356mm	693×991×356mm	650x1150x800mm
Overall Weight	Approx.87kg	Approx.115kg	Approx.150kg