





Energy Storage MV Turnkey Station

CESS-eStation-5000
CESS-eStation-5000STR
CESS-eStation10000

The MV Turnkey Station consists of the power conversion system (PCS) for energy storage, transformers, high-voltage chambers, communication and power cabinets for supporting auxiliary systems.

Product Features

-  High Efficiency
-  Provide PQ, VF, VSG
-  Full power four-quadrant operation and black start ability
-  High integration and convenient transportation, lifting, installation and construction



Product Parameters

PRODUCT MODEL	CESS-eStation-5000	CESS-eStation-5000STR	CESS-eStation10000
DC Parameters			
Max. DC voltage	1500V	1500V	1500V
Min.DC voltage	1000V	1000V	1000V
Number of DC inputs	4	24	8
AC parameters (On Grid)			
AC output power	5000kW (1250kW×4)	5000kW (215kW×24)	10000kW(1250kW×8)
PCS AC voltage range	607V~759V (Adjustable)	607V~759V (Adjustable)	607~759V (adjustable)
Nominal grid frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Harmonic (THDi)	<3%(100% load)	<3%(100% load)	< 3%(100% load)
Power Factor	-1~+1	-1~+1	-1~+1
AC parameters (Off-Grid)			
PCS Nominal AC voltage	690V, 3W+PE	690V, 3W+PE	690V, 3W+PE
PCS AC voltage range	607~759V (Adjustable)	607~759V (Adjustable)	607~759V (adjustable)
AC voltage distortion	<3%(100% linear load)	<3%(100% linear load)	< 3%(100% linear load)
Unbalanced load capacity	100%	100%	100%
Nominal grid frequency	50/60Hz	50/60Hz	50Hz/60Hz
Transformer			
Isolation mode	Oil-Immersed Transformer	Oil-Immersed Transformer	Oil-Immersed Transformer
Transformer rated power	5000kVA	5000kVA	10000kVA
LV/MV voltage	0.69kV/35kV (10kV~35kV Optional)	0.69kV/35kV (10kV~35kV Optional)	0.69kV/35kV (10kV to 35kV Optional)
Transformer vector	Dy11	Dy11	Dy11-y11
Transformer cooling type	ONAN/KNAN	ONAN/KNAN	ONAN/KNAN
Basic parameter			
Dimension (W×D×H)	6058×2438×2896mm	6058×2438×2896mm	12192*2438*2896mm
Weight	≤20t	≤20t	≤40t
Operating temperature range	-30 ~ 65°C(Derating above 45°C)	-30 ~ 65°C(Derating above 45°C)	-30°C~65°C (Derating above 45°C)
Max. altitude	4000m(>2000m degrading)	4000m(>2000m degrading)	4000m (> 2000m Derating)
IP rating	IP54	IP54	Ip54
Relative humidity	0-95%	0-95%	0 to 95% (No condensing)
Cooling mode	Forced air cooling	Forced air cooling	Forced air cooling
communication protocol	Modbus TCP、IEC104、IEC61850	Modbus TCP、IEC104、IEC61850	Modbus RTU/ TCP、IEC104、IEC61850
Certificate	IEC62271-100, IEC62271-103, IEC62271-200, IEC60076, IEC62477-1, EN50549-2, IEC61000-6-2/4, ANSI C57.12.10/20	IEC62271-100, IEC62271-103, IEC62271-200, IEC60076, IEC62477-1, EN50549-2, IEC61000-6-2/4, ANSI C57.12.10/20	IEC62271-100, IEC62271-103, IEC62271-200, IEC60076, IEC62477-1, EN50549-2, IEC61000-6-2/4, ANSI C57.12.10/20