

The new generation of string type

500kW Liquid Cooling PCS

Breaking the limit of power density

High security, high reliability, good interaction
true construction network
and easy integration in multiple scenarios



www.tecloman.com

Tal 31, 80331 Munich, Germany

Dual main control — Dual-core

High security

us Level



Surge



Short

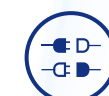
ms Level



DC overcurrent
software prote



AC overvoltage
crowbar



DC reverse
protection



AC over/under
frequency
protection



DC overvoltage
software
protection



AC overcurrent
software
protection



DC voltage
unbalance
protection

s Level



Anti-island



Liang Communication is interrupted

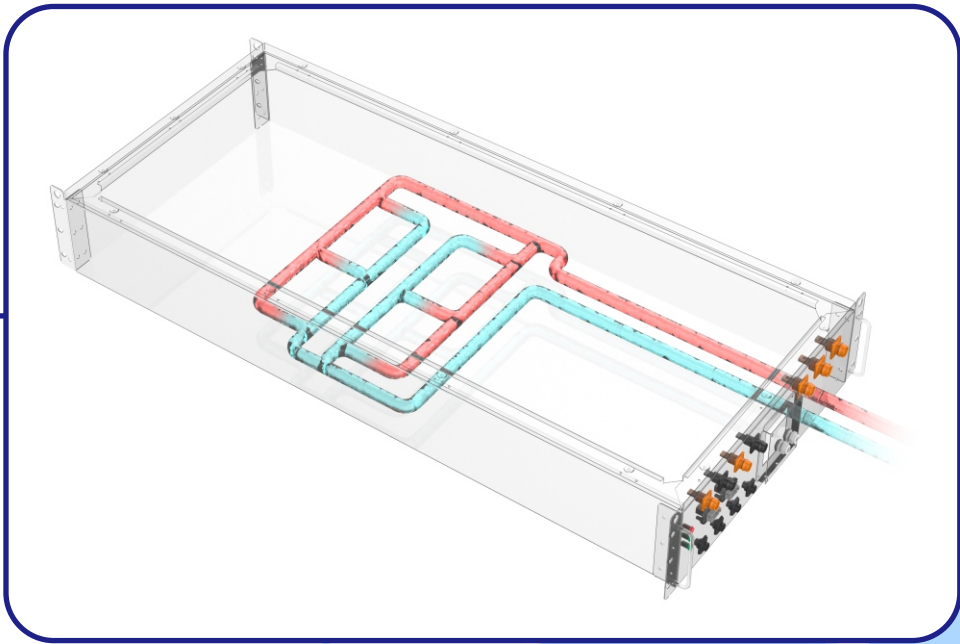


Insulation protection



Overheat protection

Liquid Cooling View



IP66|C5

High Reliability

High Environmental Adaptability

Extreme cold :-40°C



Sweden

Desert + High temperature



Xizang

Saudi Arabia

Altitude: 4000m



Coastal areas + saline-alkali land

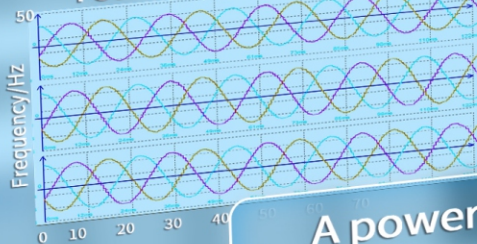


Chile

Over ten thousand log records

[2025-10-11 8:01:20.682] PCS is entering GRID switch-on state.
[2025-10-11 8:01:26.192] PCS is entering RUN state.
[2025-10-11 8:05:26.187] PCS is shut down.
[2025-10-11 8:05:26.253] PCS is entering STANDBY state.

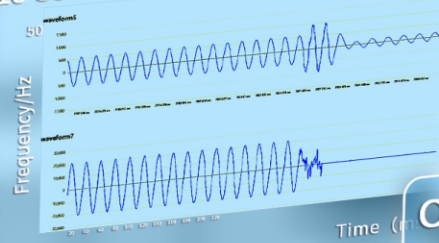
5kHz high-resolution real-time waveform



One-click export of logs

Start time End time Name
2025-9-25 2025-9-26 PCS/App.cell.log.9

10-second ultra-long fault recording



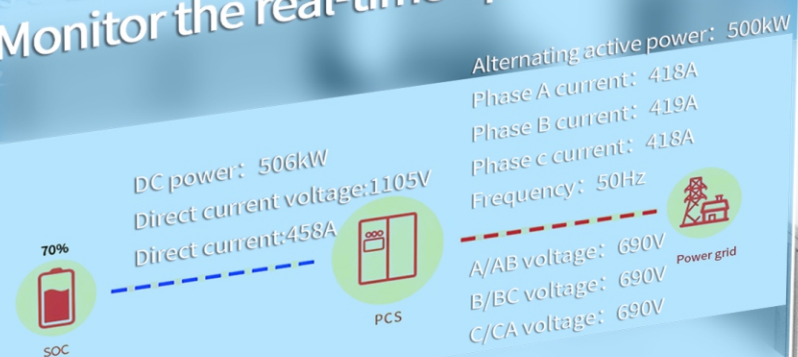
A power station of 100 MW 5-minute group control upgrade

Select equipment upgrade
pcs-1 ☒ pcs-2 ☐ pcs-3 ☒

pcs-4 ☐ pcs-5 ☒

Start upgrading

Monitor the real-time operating status



One-click import of parameters

File name
dsp-20251016104840.xls

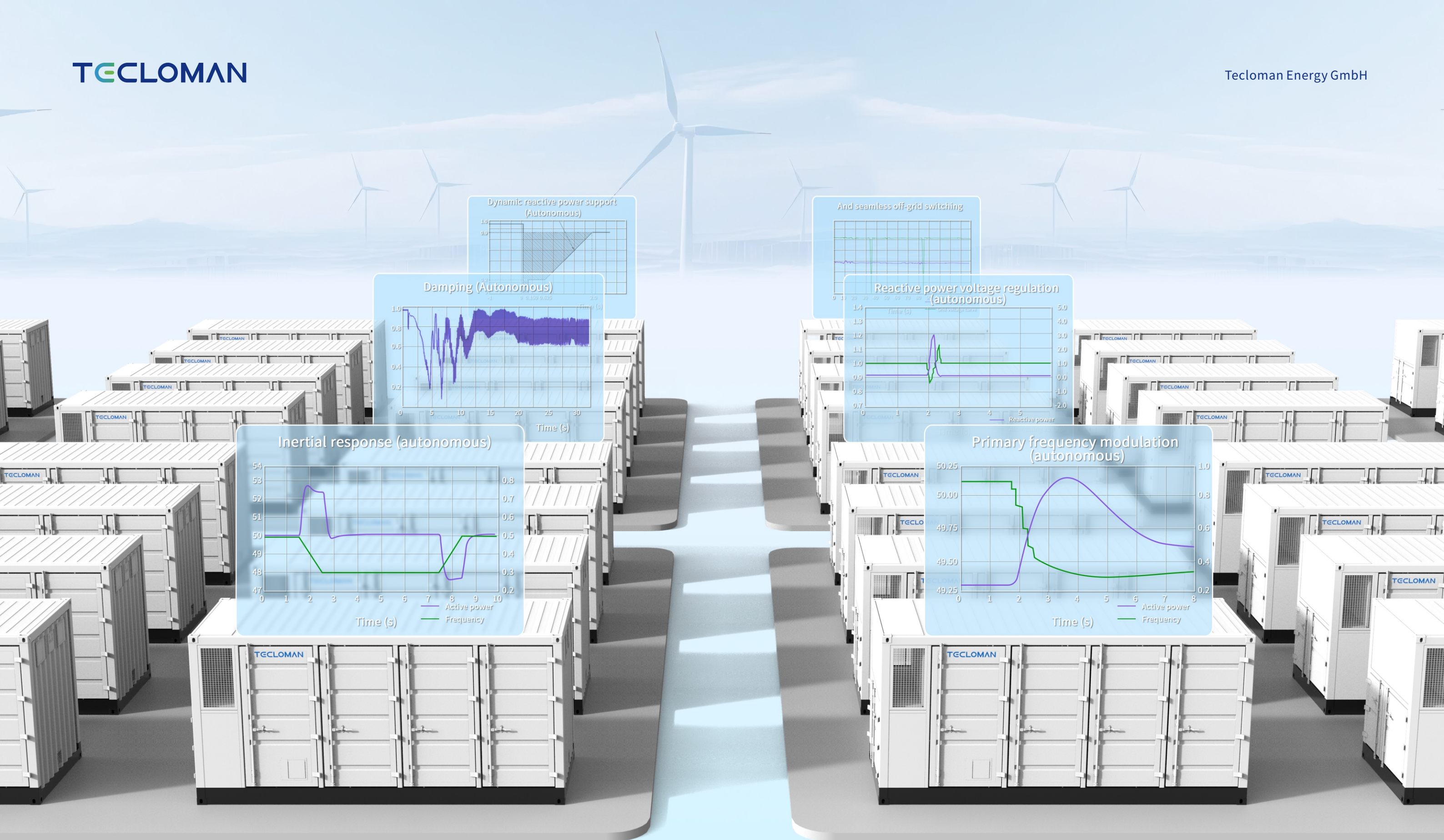
Import

One-click switch between UL/CE/GB

Grid connection standard switching

GBT34120
EN50549-1
VDE4110
IEEE1547

Friendly interaction



Strengthen the network construction capability



Independent
Energy Storage



Microgrid



Wind Power
Storage



Petroleum energy
storage



Wind Power
Storage



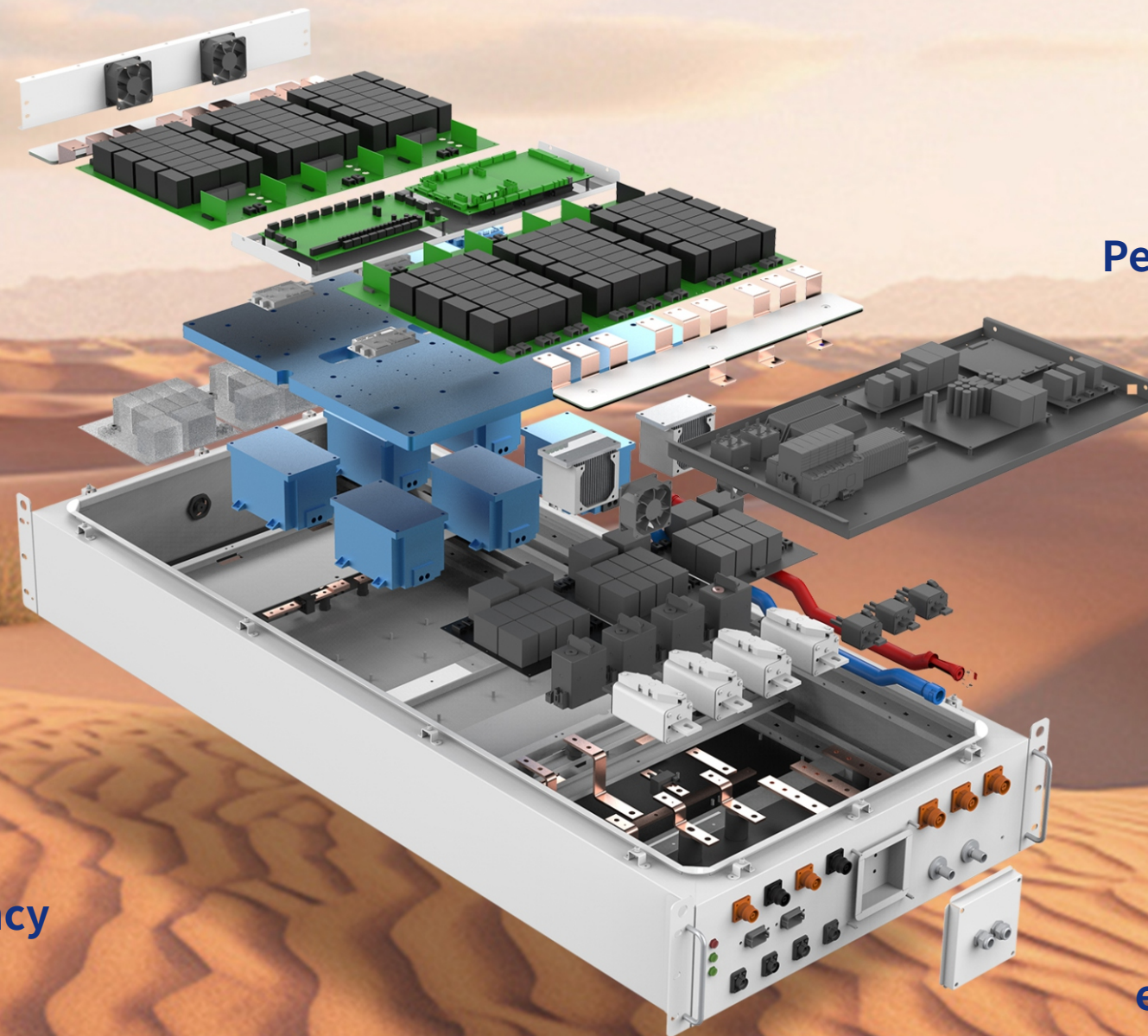
Mine energy
storage



Coordinated Frequency
Modulation



Construction
energy storage



Meet the needs of different scenarios



AC/DC integrated network type



**AC/DC Integrated network Type
(Domestic version)**



**Converter and boost integrated machine
Follow the network/Construct the network**

Highly compatible with 500+Ah systems

Model	TPCS-500/0.69/3-LM
Direct current side	
DC voltage range	1050 ~ 1500V
Maximum DC power	550kW
Maximum DC current	262A×2
AC grid connection parameters	
Rated AC power	500kW
Maximum AC power	550kW
Rated alternating current	418A
Maximum alternating current	460A
Rated grid voltage	690V
Maximum overload capacity	110% overload (long-term), 120% overload (1 minute)
Allowable voltage range of power grid	-12% ~ +10% (Configurable)
Grid connection type	3P + PE
Rated grid frequency	50Hz / 60Hz
Allowable power grid frequency range	45 ~ 50Hz / 60 ~ 65Hz
Range of adjustable power factor	-1 ~ +1
Isolation transformer	无
THDi at rated power	<3% (Rated power)
AC off-grid parameters	
Rated AC power	500kW
Rated output voltage	690V
Rated alternating current	418A
Rated frequency	50Hz / 60Hz
THDv at rated power	<3% (Rated power)

Product specifications

Model	TPCS-500/0.69/3-LM
System	
Isolation method	Non-isolated type
Maximum conversion efficiency	98.7%
Allow ambient temperature	-40 ~ +60°C
Cooling down method	Liquid cooling
Levels of protection	IP66
Relative humidity	0 ~ 95% (No condensation)
Highest altitude	2000m (Linear derating to 70% from 2000m to 4000m)
Way to install	Rack-mounted/vertical
Size (W×D×H)	780×1850×245 mm
Weight	200kg
Communication in-terface	RS485、CAN、Ethernet
Communication pr-otoeol	MODBUS-RTU / MODBUS-TCP / IEC61850(GOOSE、MMS Dual networks) / IEC104
Attestation	
Standard	UL1741, IEEE1547, IEC/EN62477-1, EN50549-1, IEEE519, IEC/EN61000-6-2, IEC/EN61000-6-4, FCC Part 15

Electrical schematic diagram

