



VDL ENERGY SYSTEMS



e – PU10 Specifications

SYSTEM CONFIGURATION		
Configuration	e-PU10 360/600	e-PU10 360/800
SYSTEM PERFORMANCE		
Rated Power	360 kVA (300 kW)	360 kVA (360 kW)
Rated Total Energy Capacity	600 kWh	800 kWh
Rated Netto AC Energy output	530 kWh*(1)	720 kWh*(1)
Rated Current	520A	
Voltage	400/230* +/- 10%	
Frequency	50Hz +/- 5%	
Charge/Discharge efficiency	>93%	
Cooling/Heating	Heat Pump / Liquid Cooled	
AC Power Max Output;	360 kVA + 500 kVA Feedthrough = 860 kVA Output (1200A)* (2)	
AC Power Input Minimum	32A	
CONNECTIONS		
AC-in	2 Set Powerlock 400A (PE, L1,L2,L3,N)	
AC-in rated current	700A	
AC-out	2 Set Powerlock (PE, L1,L2,L3,N*), CEE 32A/63A*(2)	
AC-out rated current	1200A *(2)	
Stand-by Supply	CEE 32A	
Grid Supported	TN-S, TN-C, IT	
BATTERY MODULES		
Chemistry	LiFePO4	
Depth Of Discharge	90%	
Thermal Mangement	Liquid Cooled	
Expected Life time (65% SOH)	>10 Years	
SYSTEM DATA		
Dimensions	2991 x 2438 x 2591 mm 10ft ISO	
Weight	8500 kg	9750 kg
Operational Temperature	-25 / +45 °C	
System Consumption	De-energized 150W / Energized 2.8 kW*(1)	
Noise Level	68 dBA @ 1m	
IP Rating Container	IP55	
Altitude	3000m Derating above 1000m	
SYSTEM MODES		
Mode: Grid Forming	400V or 230V AC network	
Mode: Grid Following	Parrallel to mains grid,	
Mode: Peakshaving over input	Automatic mains failure with back synchronization, minimum 32A with up to 700% stepload* (3)	
Mode: Peakshaving (external measurement)	With external measurement point up to 100M from e-PU10* (3)	
Mode: Back-Up (AMF)	Seamless shifting from grid following to microgrid, by controlling AC-in* (3)	
Mode: Smart Genset Link	Advanced generator control (Fixed power, Droop, isynchronous) over AC-In* (3)	
Mode: Parallel Operation	Coupling of multiple systems in microgrid through drooping	
Mode: Load sharing	Peakshaving over input with start/stop for external genset, Automatic mains failure with back synchronization, minimum 32A with up to 700% stepload* (3)	
Mode: Load Balancing	Peakshaving external measurement point up to 100m, with start/stop for external genset* (3)	
COMMUNICATION & LOGISTIC		
Interface	Touch HMI, Online Portal	
Protocols (option)	Modbus TCP/IP, Profinet (for external controller)	
Remote Monitoring/control	IOT Platform VDL Powernet* (2)	
External Communication	4G, RJ45 Ethernet	
Data Logging	Realtme 100ms, Historical 1/15 Min,	
Transportation	Forklift Pockets, Twistlocks Corner Blocks at bottom	
PROTECTION & SAFETY		
Electrical System	Short Circuit, Overcurrent Protection, Residual Current Monitoring, Insulation monitoring (Only in IT), Surge Protection	
Fire Detection	Smoke Detection, CO Detection	
System Monitoring	Advanced system monitoring, Battery Cell, Inverter stack, Cooling system, Enclosure, Connection panel	
CERTIFICATIONS & STANDARDS		
System	PGS37-1, IEC62933-5-2	
Battery Modules	UN38.3 , EC62619, NEN4288, UL9540A	
EU Directives	CE, Low Voltage Directive 2014/35/EU, EMC Directive 2014/30/EU, Battery Directive 2006/66/EU	

1) Ambient temperature 23°C, Power output 300 kW.

2) Optional available, VDL to Advice

3) Operation mode only available in combination with e-PU10 option packages, VDL to advice.

POWER
FOR
TOMORROW

