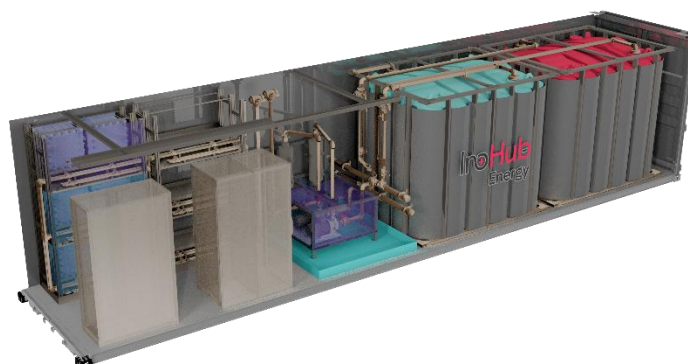


INO-HUB Energy Redox Flow Battery

100/500

Preliminary Technical Datasheet



Product Highlights	Technical Data	
INDUSTRIAL GRADE PERFORMANCE 20,000+ charge/discharge cycles 100% Depth of Discharge - No capacity degradation over lifetime	Type	
	Battery Technology	Vanadium Redox Flow Battery
FLEXIBILITY & SCALABILITY - Modular architecture – scalable power and energy independently - Wide operating temperature range: -15°C to +50°C - Efficient performance across extreme ambient conditions	Battery performance AC	
	Rated charge/discharge AC power	100 kW
SAFE - Non-flammable - Leakage and containment protection - Low noise emissions	Usable energy	
	At POC and rated AC power	500 kWh
SUSTAINABILITY & LIFETIME 20+ years operational lifetime - Water-based, fully reusable vanadium electrolyte - Zero hazardous waste – electrolyte retains value at end of life	Cycle life	> 20.000 @ 100% DOD
	Battery interface	
EUROPEAN QUALITY - Designed and manufactured in Europe - Built to EU safety and environmental standards	DC connection	32 ... 64 V, IT-Grid
	Max. DC current	12 x 200 A
	Protection DC side	Fuses, insulation monitoring, surge protection device, main switch
	AC connection	400 V, 50 Hz, 3P+N+PE, TN-S-grid
	Auxiliary power (max. / average)	10 kW / 6 kW
	Communication	MODBUS TCP/IP
	General	
	Design lifetime	25 years
	Electrolyte solution	Water based vanadium electrolyte, non-flammable, re-usable
	Noise emission	<45 dB(A)
	Standards and directives complied with	CE
	Ambient temperature range	-15 °C ... + 45 °C
	Mechanical data	
	Enclosure type	Thermally isolated 40' ISO HC-containers with C3 coating
	Footprint (w/o stairs) L x W	12.2 x 2.4 m
	Height with cooling system	3 m
	Total weight in operation	46 t
	Degree of protection	IP 54