

Technical data sheet INTILION | scalebloc

	INTILION scalebloc energy	INTILION scalebloc power	INTILION scalebloc power boost
General data			
System type	AC-coupled battery energy storage system (BESS) in air-conditioned IP55 outdoor control cabinet		
Scalability	Up to 4 INTILION scaleblocs connected in parallel (retrofittable) ¹		
Operating mode	Grid-connected operation (GCO), grid-forming operation (GFO) ²		
Applications	Setpoint specification, self-consumption optimisation, load peak shaving		
Communication standards	Modbus TCP/IP, cloud connection via LTE		
Compatible EMS	Smart1, Solar-Log Base, Wago Application Customer Substation, Meteocontrol, others on request		
Application areas	Peak shaving, self-consumption optimisation, pre-charge storage electromobility, control via external EMS, emergency power systems		
Electrotechnical data			
Energy content, nominal	72.8 kWh		
Energy content, usable	65.6 kWh (90 % DoD)		
Voltage, nominal	400 V AC (3L, N, PE), 50 Hz		
Grid type ³	TN-S, TN-C-S, TT		
Power, nominal	25 kVA	50 kVA	73 kVA
Current, nominal	37 A	74 A	106 A
Initial short-circuit alternating current I _k " (GCO)	45.6 A	91.2 A	136.8 A
Max. short circuit current (GFO)	300 % of P _{nom}		
Overload capacity (GFO) ⁴	150 %	150 %	125 %
Asymmetrical load (GFO)	25 % of P _{nom}		
Minimum pre-fuse protection	63 A	100 A	125 A
Lightning protection class	Class 1 & 2		
Battery data			
Cell type	Lithium-ion (NMC), prismatic, 100 Ah		
Cell arrangement in the system	198S1P		
Voltage, nominal	729 V DC		
Design data			
Ambient temperature	-20 °C to +50 °C ⁵		
Installation height	Max. 2000 m NN (higher installation sites on request)		
Weight (approx.)	935 kg	965 kg	998 kg
Dimensions (H x W x D)	2125 mm x 1674 mm x 1026 mm		
Max. connection cross section	5 x 50 mm ²		
Noise emission	< 35 dB(A) _(5m) with optional sound insulation hood		
Performance			
Expected cycles to 70% SoH ⁶	>8000 (@90 % DoD), >9000 (@70 % DoD), >10000 (@50 % DoD)		
Intended service life	15 years		
Performance guarantee	10 years or 327.500 kWh energy throughput on the battery		
Norms & standards			
EU Directives	2014/53/EU (RED), 2014/30/EU (EMC), 2014/35/EU (LVD), 2006/66/EC (BAT Directive)		
Norms & standards	EN 61000-6-2, EN 61000-6-4, EN 62040-2, EN 61439-1, EN 61439-2, EN 62109-1, EN 62619, UN 38.3, VDE-AR-E 2510-50 6.2.6, VDE-AR-N 4105, VDE-AR-N 4110, EN 50549-1, TOR producer type A & TOR producer type B, UNE 217002:2020, UNE 206007-1:2013, UNE 206006:2011		

¹ Parallel connection of five or more INTILION | scaleblocs as well as retrofits on request

² Grid-forming operation mode only for 1 BESS possible

³ Other grid types on request

⁴ For dynamic load/generator connection < 1 min at nominal voltage 230 V AC

⁵ At temperature extremes (between -20 °C and -10 °C as well as between +35 °C and +50 °C) capacity may be derated. Avoid direct solar radiation, if necessary, use solar shield.

⁶ Theoretical value at EOL up to 70 % SoH, 10 yrs. operating life; operating parameters: 0.5 C, 23 °C, 90 % DoD