



Technical data sheet

INTILION | scalestac

Secure.
Scalable.
Economical.



The advantages at a glance

- ▶ Modular and flexibly expandable battery storage system at the power and capacity level
- ▶ First standardised system with charge/discharge performance up to 2C
- ▶ Plug & Play, all-in-one, AC-coupled solution
- ▶ 123/154 kWh nominal energy capacity
- ▶ One to sixteen 25 kVA three-phase 4Q inverters of the latest generation
- ▶ Maximum battery cell life
- ▶ Lithium Ferrum Phosphat for maximum operational and fire safety
- ▶ Fully comprehensive energy management system for monitoring all installed systems and reliable remote maintenance service
- ▶ Improved maintainability through plug-in modules (battery modules, battery management system, inverter)
- ▶ Additional UPS system for safe operation during a power outage
- ▶ Integrated NA protection/uncoupling protection according to VDE AR-N 4105/4110 incl. test terminal strip

Areas of application:

- ▶ Electromobility
- ▶ Agriculture
- ▶ Industry
- ▶ Quarters

Applications:

- ▶ Peak-shaving
- ▶ Mains backup power supply
- ▶ Grid services
- ▶ Self-consumption optimisation

Technical data

	INTILION scalestac power	INTILION scalestac power boost
Technical data		
System type:	AC-coupled system IP 20	
Scalability:	Up to 16x parallel connectable (also retrofittable)	
Operating mode:	Mains parallel operation, mains backup power operation	
Areas of application:	Ongrid: peak shaving, self-consumption optimisation, pre-charge storage of electromobility, setpoint specification by external EMS; Offgrid: standby grid operation *1	
Electrotechnical data		
Energy content, nominal:	154 kWh	123 kWh
Energy content, usable:	138,6 kWh (90 % DoD)	110,7 kWh (90 % DoD)
Voltage, nominal:	400 V AC (3L, N, PE), 50 Hz	400 V AC (3L, N, PE), 50 Hz
Net shape:	TN und TT*2	TN und TT*2
Power, nominal:	up to 400 kVA (with up to 16 inverters)	up to 400 kVA (with up to 16 inverters)
Sliding load capacity:	33 % the system performance / per inverter 8,33 kVA	33% the system performance / per inverter 8,33 kVA
Overload capacity in grid-forming operation*3:	125 % for 10 min 150 % for 1 min	125 % for 10 min 150 % for 1 min
Power factor:	-1 to 1	-1 to 1
Power, nominal:	per inverter 37 A	per inverter 37 A
Power, max.:	per inverter 54 A for 1 minute	per inverter 54 A for 1 minute
General data		
Cell type:	Lithium-Ionen (LFP), prismatic	
Battery DC voltage, nominal:	768,0 V bis 844,8 V	
Ambient temperature:	0 °C bis +40 °C	
Installation height:	Max. 2000 m NN*4	
Weight control cabinet (min.):	~ 800 kg	~ 800 kg
Weight battery cabinet (ca.):	1848,5 kg	1597,7 kg
Control cabinet dimensions (H x W x D):	2000 mm*5 x 2000 mm (2600mm) x 800 mm	
Dimensions battery cabinet (H x W x D):	1860 mm x 1000 mm x 938 mm	
Communication standards:	Modbus TCP/IP, cloud connection*6	
Performance		
Zyklen bei 90 % DoD und 70 % SoH:	6000*7	
Design Life:	15 years	
Performance-Garantie:	10 years resp. 4000 cycles on the battery*8	
Norms & Standards		
EU-Guidelines:	2014/53/EU (RED), 2014/30/EU (EMC), 2014/35/EU (LVD)	
Norms & Standards:	EN 300 328 V2.1.1, EN 61000-6-2, EN 61000-6-4, EN 62040-2, EN 61439-1, EN 61439-2, EN 62109-1, EN 62109-2, EN 62619, UN 38.3,vVDE-AR-N 4105, VDE-AR-N 4110, EN 50549-1, TOR Erzeuger Typ A	
Country certifications:	Germany, Austria, Switzerland, Netherlands, Czech Republic, Poland, Romania, Ukraine, Sweden, Norway, Finland, Albania, Bosnia & Herzegovina, Bulgaria, Croatia, Estonia, Iceland, Latvia, Lithuania, Macedonia, Montenegro, Serbia, Slovenia, Slovakia	

*1 Optionally expandable, longer delivery times possible in start-up phase.

*2 Further network forms on request.

*3 Value is still being finalised by further tests and may therefore deviate slightly.

*4 Higher installation locations on request.

*5 Height of control cabinet including optionally extendable base 2200 mm.

*6 Internet connection to be provided by customer.

*7 Theoretical value at EOL: up to 70 % SoH, 10 years operating time; operating parameters: 0,5C, 23 °C, 90 % DoD.

*8 The associated warranty conditions can be found on our website: www.intilion.com.

Configuration options

INTILION scalestac power (up to 1C)						
Power	Energy	1	2	3	4	5
		154 kWh	308 kWh	462 kWh	616 kWh	770 kWh
25 kVA		✓	✓	✓	✓	✓
50 kVA		✓	✓	✓	✓	✓
75 kVA		✓	✓	✓	✓	✓
100 kVA		✓	✓	✓	✓	✓
125 kVA		✓	✓	✓	✓	✓
150 kVA		✓	✓	✓	✓	✓
175 kVA			✓	✓	✓	✓
200 kVA			✓	✓	✓	✓
225 kVA			✓	✓	✓	✓
250 kVA			✓	✓	✓	✓
275 kVA			✓	✓	✓	✓
300 kVA			✓	✓	✓	✓
325 kVA				✓	✓	✓
350 kVA				✓	✓	✓
375 kVA				✓	✓	✓
400 kVA				✓	✓	✓

INTILION scalestac power boost (up to 2C)			
Power	Energy	1	2
		123 kWh	246 kWh
25 kVA		✓*	✓*
50 kVA		✓*	✓*
75 kVA		✓*	✓*
100 kVA		✓*	✓*
125 kVA		✓	✓*
150 kVA		✓	✓*
175 kVA		✓	✓*
200 kVA		✓	✓*
225 kVA		✓	✓*
250 kVA		✓	✓
275 kVA			✓*
300 kVA			✓*
325 kVA			✓*
350 kVA			✓*
375 kVA			✓
400 kVA			✓

✓* In this configuration, the overall system performance is < 1C.



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