

THE INDEPENDENCE FOR FAMILIES.



VKB-NUMBER	DE + AT	CH
VARTA element backup 6/S5	02709 858 341	02709 858 241
VARTA element backup 12/S5	02709 858 353	02709 858 253
VARTA element backup 18/S5	02709 858 365	02709 858 265
Retrofit Kit VARTA element S5/6-12	37000 802 613	37000 802 613
Retrofit Kit VARTA element S5/12-18	37000 802 614	37000 802 614

► Technical data and facts

SYSTEM DATA	ELEMENT BACKUP 6	ELEMENT BACKUP 12	ELEMENT BACKUP 18
Battery capacity usable / nominal	5,9 / 6,5 kWh ¹	11,7 / 13,0 kWh ¹	17,7 / 19,5 kWh ¹
Max. AC power charge / discharge	2,2 / 1,8 kW	4,0 / 3,7 kW	4,0 / 4,0 kW
Weight	115 kg	165 kg	215 kg
Dimensions (w x h x d) in mm	600 x 1.176 x 500		
Rated current backup operation	5,8 A per phase		
Overload backup operation	max. 12 A per phase		
Switchover time backup operation	<90 seconds		
Electrochemistry	NMC		
Safety	Multi-level, hard- and software redundant cell monitoring		
Mains connection / configuration	400 V AC, 3-phase, 50 Hz (TN- and TT-systems)		
Country licenses	Germany, Austria, Switzerland		
Protection class	IP 22		
Cooling	Temperature-dependent fan control		
Noise emission typical/max.	42 dBA / 49 dBA		
Ambient conditions	+5 °C to +30 °C		
System warranty	10 years (permanent internet connection), 5 years (without internet connection) ²		
Warranty on batteries	10 years or 4.000 cycles ³		

FUNCTIONS

Energie management system	EMS VS-Pro 2
Smart home interfaces	XML, Modbus TCP (Sunspec)
Visualisation of production data	PV sensor, data logger, Modbus TCP (Sunspec) ⁴
Dynamic PV export limitation	Modbus TCP (Sunspec) ⁴
External relay control	Rutenbeck
Cascading	Up to five VARTA energy storage systems ⁵
Operating strategy	Self-consumption optimization, PV yield optimization
Backup system	Automatic switching, black start capability with VARTA backup box ⁶
Hardware interfaces	RJ45 (Ethernet), 2x RJ12 (current sensor and PV sensor)
Visualisation	VARTA Storage app for Android and iOS, web portal and internal web server

STANDARDS

CE-conformity, Low Voltage Directive (LVD) 2014/35/EU, EMC Directive 2014/30/EU, UN 38.3, DIN EN 62109-1:2011, VDE-AR-N 4105:2018-11, TOR Erzeuger Typ A V1.1

¹ Capacity measurement at 25 °C with 0,2 C charge to 58,8 V and 0,05 C cut-off current and discharge with 0,2 C to 42 V.

² According to terms of manufacturer's warranties (available at: www.varta-storage.com/service/downloads).

³ Residual capacity: 80 %.

⁴ According to compatibility list (available at: www.varta-storage.com/element-S5-compatibility).

⁵ Not for permanent off-grid operation. Check starting currents and loads.

⁶ In cascade operation, only one storage system can provide an emergency power function.