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INTILION

INTILION | scalepac

The power package – All-in-one

Discover the future of energy supply with our all-in-one battery storage system combined with the intelligent control centre INTILION | Application Unit, the optimal solution for maximum returns.





The power in a package

The perfect energy storage solution for Behind-the-Meter (BTM) and Front-of-the-Meter (FTM).

Discover the perfect solution for safe and efficient power storage! Our technology combines user-friendliness, flexibility, efficiency, and safety – ideal for Behind-the-Meter and Front-of-the-Meter applications. Whether grid connection expansion, peak shaving, or energy trading – our energy storage covers numerous requirements. Benefit from customised service packages, that are tailored to your needs, and optimise your electricity procurement and grid intensity. Rely on the power package for sustainable, cost-efficient, and future-proof energy supply!

Efficiency

With over 90% round-trip efficiency (AC including auxiliary consumption), you achieve outstanding energy yield. The integrated PCS ensures optimal balancing and maximum efficiency. Extensions are flexibly possible to meet future requirements. Our new all-in-one system offers high performance and longevity with over 6,000 cycles and can be overloaded up to 110% for 10 minutes.

Safety

Your data is stored exclusively on Western European servers, while 24/7 monitoring in the INTILION | Cloud ensures quick responses to disruptions. Thanks to C5 corrosion protection and fire resistance of up to one hour, we offer maximum protection. The system is therefore ideal for any climate, including salty air and particularly demanding conditions.

Why is this system the best choice?

Highly flexible – expandable at any time

Our new power storage system from 1 MWh offers a future-proof and reliable solution for energy supply. With innovative technology, the all-in-one system combines all essential components such as battery, inverter, and air conditioning in a compact housing. The modular design allows for flexible expansion, while the smallest system size consists of 4 units and is always delivered with the INTILION | Application Unit control and regulation unit. The perfect step into a sustainable future!

Optimal performance & durability

Based on our many years of experience, we exclusively use cells from leading cell manufacturers that stand for the highest quality and reliability. This ensures the optimal performance and longevity of our system.

Flexible connection options

The system can be connected directly to the low-voltage grid without any additional equipment and in the shortest possible time. The cable entry is flexible from the bottom or the back, which makes installation easier. A cable cross-section of up to 70 mm^2 is possible.

Multi-level fire protection system

We provide effective extinguishing systems at both the module and system levels that can prevent major damage in an emergency. The fire protection system consists of smoke detectors, heat detectors, aerosol extinguishing, dry-pipe water connection, and pressure relief valve.



Central interface & intelligence

The INTILION | Application Unit is the intelligence of the energy storage system. The numerous interfaces to marketers, generation plants and grid operators ensure high system availability.

Waterproof & corrosion-resistant

The system is IP54 protected, making it ideal for outdoor installation in Central Europe. Additionally, it is equipped with C5 corrosion protection to ensure a long lifespan.

Effective warning systems

Acoustic and visual alarms inform you early about potential disruptions, allowing us to respond quickly and ensure optimal system performance at all times.

One housing – everything inside

Our innovative system combines the battery, inverter, air conditioning, and BMS in a compact design that offers high performance, efficiency, and easy handling for maximum convenience.

The intelligence of the entire system

INTILION | Application Unit (IAU) – central overarching control and regulation unit

The INTILION | Application Unit, our central control and regulation unit, sets new standards in energy optimisation and offers a variety of tailored functions that are perfectly adapted to modern energy systems.

With the IAU, you can market battery storage and participate in both energy markets – the spot market and the control power market. The integrated high-precision frequency measurement enables the provision of Frequency Containment Reserve (FCR). Additionally, local applications, so-called Behind-the-Meter applications, such as self-consumption optimisation and the reduction of grid fees, can be efficiently implemented.

The IAU includes a certified Power Plant Controller and offers the necessary interfaces to grid operators. Various control concepts meet all grid requirements and compliances for both existing and new systems.

Thanks to adaptable interfaces, it can be flexibly integrated into customer systems and establish interfaces to marketers and grid operators. Targeted operational control optimises system lifespan and overall system efficiency. It is also possible to expand the entire system via the IAU.

Interface overview of external components and service providers

Customer interface

Customer-side control and data transmission.

Frequency measurement

Provision of control power – for example, FCR.

Power Plant Controller

Can be used as an overarching or downstream Power Plant controller.

Energy meter

Up to five energy meters for special control concepts such as sum and difference measurements.



*Available for wall and floor installation

Grid operator

Individual integration of the grid operator interface. Supports protocol 101 and 104.

Trader

Integration of multiple traders.

Generation plants

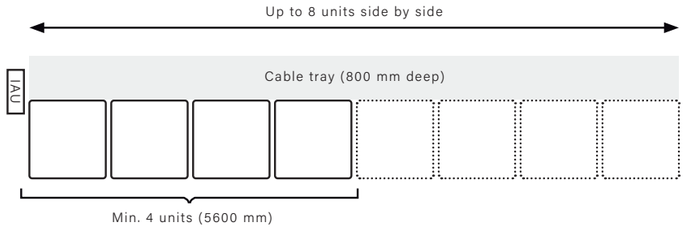
Grid-compliant integration of photovoltaic, wind, water, etc.

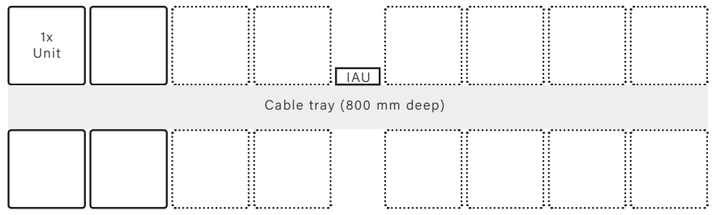


Installation variations and system scaling

System capacity from 1 Megawatt hour

The INTILION | scalepac requires only a small footprint due to flexible installation variations and can be easily expanded with multiple units in parallel. This allows you to adjust your storage capacity as needed and react flexibly to changes.





Expandability

The system can be expanded at any time, regardless of the aging condition. This keeps the system up-to-date and flexible for new applications. For easy installation, cable routing can be flexible from below or behind.

Fail-safety

If one unit fails, all others continue to run reliably. Your energy supply is thus always secured.

Note: With the current IAU, up to 16 units of a total storage system can be connected.

Who we are? Your performance and implementation expert!

One contact for the entire project – everything from a single source

We offer innovative and sustainable energy storage solutions for large-scale storage projects, opening up attractive business models with grid-supportive storage systems as well as for industrial companies that focus on efficiency.

The acquisition and integration of a battery storage system require thorough preparation and know-how. With our many years of experience as a battery storage integrator, we understand the complexity of each project phase and support you. More than just power storage: We offer tailored consulting, service packages in multiple service levels, and quick response times. As a reliable contact, we ensure the highest service availability and take care of everything. With us, you have a direct, German-speaking partner who not only provides qualified hardware but also comprehensive system engineering, thoughtful project management, and competent advice – even on regulatory issues.

Our trained professionals are available both remotely and on-site with quick response times, supported by a large service partner network throughout Germany. We have already successfully installed over 800 MWh of storage capacity in the German and European markets. Additionally, we offer software solutions for customer-specific applications and enable flexible integration of external components, for example through configurable interfaces such as the connection to marketers.

With our powerful and high-quality hardware, always from reputable suppliers, we offer optimal cost-benefit ratios. Our modular and highly scalable solutions adapt to the needs of our customers. Thanks to many years of experience as a battery storage integrator, we know the challenges of each project phase – from grid registration to commissioning.

For us, a successful battery storage project is more than just technology: We accompany you every step of the way – from contract award through design freeze and material procurement to implementation and final service. Trust our expertise and benefit from individually tailored solutions for hardware, service, and marketing that help you achieve maximum profits.



Storage Plus

More than energy storage

The purchase and integration of a battery storage system requires thorough preparation and expertise. Thanks to our many years of experience as a battery storage integrator, we are familiar with the complexity of each project phase and can support you

Support with registration processes

We help with planning and approval processes when connecting battery storage systems to the grid, including documents for registration procedures, certificates, measurement concepts and protection technology.

Support with building permits

We assist you with building permits, including building application documents, and offer individual solutions for locations with high water or noise control requirements.

Help with plans & calculations

We draw up foundation plans, perform static calculations and develop individual concepts for your site, including logistics, access roads, soil conditions and the crane base.

Grid compliance & regulations

We offer certified power plant controllers, grid compliance concepts, and conduct interface and signal tests with grid operators and traders for efficient and seamless system connections to the power grid.

Construction site coordination

We appoint experienced site managers, prepare the site, handle logistics, coordinate deliveries, and manage the project. Additionally, we have a certified central warehouse for batteries in Paderborn to address project delays and store spare parts.

Special fire safety measures

We supply batteries meeting the highest safety standards and implement special fire safety measures for our lithium-ion storage systems, ensuring maximum safety and reliability when operating your plant.

Individual business model advice

We offer comprehensive advice on business models ranging from stand-alone to co-location, establish the framework conditions pertaining to energy management, devise entire concepts with marketing partners, produce profitability analyses and offer support in relation to the financial feasibility of the BESS.

Our own installation & service teams

Our German-speaking and nationwide service teams support you remotely and on-site. As qualified partners to our suppliers, we carry out commissioning, maintenance and service work to ensure high system availability.





Our service packages make the difference

Our service packages

Benefit from our versatile service packages that offer you everything you need. Our end-to-end service package goes far beyond the mere provision of the system

With our experience and expertise, we accompany you from planning and installation through maintenance and operation to the end-of-life of your system. We ensure smooth and reliable construction as well as operation of the storage system, guaranteeing long-term profitability.

- Optimal system monitoring
- 24/7 support
- Always optimal system performance
- Proactive maintenance and care of the systems
- Ensuring compliance and certificates
- Quick response times
- High-quality components for optimal performance and safety
- Detailed analyses to increase efficiency
- Optional warranty extension
- Wide service network in the DACH region

Overview of the service packages

Basic

The „Basic“ service package offers a cost-effective solution for the essential maintenance requirements of your battery storage. Ideal for cost-sensitive companies or investors who still want to benefit from a reliable level of security.

Advanced

The „Advanced“ service package is the ideal choice for risk-averse customers seeking comprehensive support and maximum protection for their investments. Benefit from an all-round service that optimally protects your assets and secures your returns.

Technical data at a glance

Discover the all-in-one system INTILION | scalepac

Here you will find all the technical data of our product at a glance - clearly and compactly summarised to give you a quick and easy overview of the most important specifications

General data						
System type	Battery storage system (All-in-One System) in a climate-controlled IP54 outdoor enclosure					
Operating mode	Grid-parallel operation (GPO)					
Use cases	Peak shaving, self-consumption optimisation, atypical/intensive grid usage, energy trading, multi-market optimisation including control power and co-location applications					
Applications	Setpoint specification, self-consumption optimisation, peak shaving, primary control power, marketer specification, marketer schedule					
Communication standards:*1	Modbus TCP/IP, remote control protocols, cloud connection					
Battery enclosure	**scalepac**	**scalepac[4]**	**scalepac[5]**	**scalepac[6]**	**scalepac[7]**	**scalepac[8]**
Cell type	Lithium-Ion (LFP), prismatic, 306 Ah					
Energy content, nominal:	254 kWh	1016 kWh	1270 kWh	1524 kWh	1778 kWh	2032 kWh
Usable energy content (90% DoD)	228.6 kWh	914 kWh	1143 kWh	1372 kWh	1600 kWh	1828 kWh
Max. charge/discharge power	0.5 P					
Nominal current per unit	per WR182A					
Colours	RAL 7035 (Light Grey), RAL 2004 (Orange)					
IP Protection/Corrosion Protection Class	IP 54/C5					
Cooling	PCS = Air-cooled, Pack = Liquid-cooled (R134a)					
Ambient temperature	-20 °C to +50 °C (>40°C derating)					
Installation height	Max. 3000 m above sea level					
Weight (approx.) per unit	< 2.8 t	<11.2 t	<14 t	<16.8 t	<19.6 t	<22.4 t

Dimensions (H x W x D) per unit in mm	2250 x 1420 x 1425	2250 x 5680 x 1425	2250 x 7100 x 1425	2250 x 8520 x 1425	2250 x 9940 x 1425	2250 x 11360 x 1425
Guaranteed energy throughput until EOL (per unit)	10 years or 2.5 GWh*2	10 years or 10 GWh*2	10 years or > 12.5 GWh*2	10 years or > 15 GWh*2	10 years or 17.5 GWh*2	10 years or 20 GWh*2
Expected lifetime	≥ 15 years					
Product/performance warranty	up to 10 years*1					
Inverter						
Colour	integrated					
IP protection	IP20					
Apparent power per unit	≤125 kVA	≤500 kVA	≤625 kVA	≤750 kVA	≤875 kVA	≤1000 kVA
Nominal grid voltage	400 V (3L, N, PE), -15% to +10%					
Max. AC current (per power unit)	217 A					
System data						
Round-Trip-Efficiency (RTE) - AC	~ 90%					
Grid form	TN-S, TN-C, TN-C-S					
Max. overload capability	110% for at least 10 minutes					
Energy, nominal	from 1.016 MWh (scalable up to 16 units)					
Power, nominal	customer-specific from 500 kVA (scalable in ~125 kVA steps)					
System dimensions	see standard layout					
Standards & norms						
Battery	EN 61000-6-2, EN 61000-6-4, EN 62619, UN 38.3, 2006/66/EG (BAT Directive)					
Inverter	EN 62109-1, EN 62040-2, EN 61439-1, EN 61439-2					
System	VDE-AR-N 4105, VDE-AR-N 4110, EN 50549-1, TOR Generator Type A, TOR Generator Type B, 2014/53/EU (RED), 2014/30/EU (EMC), 2014/35/EU (LVD)					

*1 Further on request

*2 Depending on which event occurs first

INTILION

All information in this brochure is based on the current state of technology. Our products are subject to continuous development, so we reserve the right to make changes. All images are similar.

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