

# ferroamp

## Power Storage Module

PSM 10 kWh / 4 kW

PSM 12,5 kWh / 5 or 10 kW

PSM 15 kWh / 6 or 12 kW



### Multi-purpose energy storage

- Compatible with the EnergyHub system
- Ready for\* back-up and off-grid operation
- Safe and long-life LiFePO4 technology
- High power capacity
- Integrated DC/DC converter

## DC coupled energy storage

The Power Storage Module with storage capacity up to 15 kWh and power rating up to 12 kW connects directly to your EnergyHub system DC nanogrid. The versatile storage can be configured to reduce peak power in your building, enable faster Electric Vehicle charging and store your solar energy. The system is ready for back-up and off-grid operation with a suitable EnergyHub inverter.



	DC coupled energy storage				
Battery (kWh/ kW:kW)	PSM 10/4 <sup>3)</sup>	PSM 12,5/5:10		PSM 15/6:12	
Storage capacity, W <sub>NOM</sub>	10 kWh	12,5 kWh		15 kWh	
Maximum power rating, P <sub>MAX</sub>	4 kW	5 kW		12 kW	
Battery voltage, V <sub>NOM</sub>	410 V	512V		614V	
Maximum cont. battery charge current, I <sub>BAC</sub> <sup>1)</sup>	10A	10A	20A	10A	20A
Maximum cont. battery discharge current, I <sub>BAD</sub> <sup>1)</sup>	10 A	10A	20A	10A	20A
Electrical roundtrip efficiency incl. DC/DC converter	93 % typical				
Cycle life <sup>2)</sup>	6000 cycles @ 80% DOD, EOL capacity 70%				
Cell chemistry	LiFePO4				
Maximum battery potential to ground	1000 Vpk				
Battery fuses	20 A, 1000 V, 10x38 mm gPV				
SOC precision	≤ 5 %				
Standby consumption incl. DC/DC converters	≤ 5 W	≤ 5 W	≤ 10 W	≤ 5 W	≤ 10 W
Protection functions	Over voltage, over temperature, over current, isolation fault, pre-charge protection, short-circuit protection				
<b>DC-nanogrid</b>					
Number of included ESO DC/DC converters	1	1	2	1	2
DC bus voltage, V <sub>DC</sub>	760 V (nominal)				
DC bus voltage range, V <sub>DC</sub>	720 - 800				
Maximum DC bus current, I <sub>DC(max)</sub>	10 A	10 A	20 A	10A	20A
DC bus connection	3-wire (DC+, DC-, PE)				
DC bus Communication	Narrow band power line communication (PLC)				
<b>Physical</b>					
Dimensions H x W x D	1550 x 630 x 250 mm		2050 x 630 x 250 mm		
Weight	140 kg		210 kg		
Color	Black				
<b>Installation</b>					
Ambient temperature <sup>4)</sup>	0°C – 40°C				
Humidity	10 – 90% RH non condensing				
Degree of protection	IP 20				
BMS Power supply	230 VAC, max 40 W				
<b>Compliance</b>					
Battery safety	EN 62619:2017, UN38.3				
LVD	EN 62477-1				
EMC	EN 61000-6-3, EN 61000-6-2				

<sup>1)</sup> Maximum battery current will be derated based on temperature and state of charge

<sup>2)</sup> Cycle life specified at SOC from 10% - 90%, C-rate of 0.5 and ambient temperature of +25°C

<sup>3)</sup> Planned release during Q3 2019

<sup>4)</sup> Battery power may be derated for temperatures exceeding +30°C

\* "Ready for". This feature requires backup / off-grid enabled EnergyHub system