

# ESO - EnergyStorageOptimizer

ferroamp

15 kW

<b>Battery side</b>	
Maximum battery power	15 kW
Nominal battery voltage	600 V
Battery voltage range <sup>1)</sup>	150 – 720 V
Maximum battery current	+/- 30 A
Battery connection	2-wire (B+, B-)
Max battery fuse	40 A gPV
Battery communication	CAN
<b>DC microgrid side</b>	
DC microgrid voltage, V <sub>DC</sub>	760 V (nominal)
Maximum DC current, I <sub>DC(max)</sub>	+/- 20 A
DC microgrid connection	3-wire (L+, L-, PE)
Max efficiency	99.5 %
Maximum DC side fuse	25 A gPV
DC microgrid communication	Ethernet
<b>Physical</b>	
Dimensions H x W x D (excl. connectors)	470 x 250 x 150 mm
Weight	10 kg
Color	Natural anodized
<b>Installation</b>	
Topology	Non-isolated, B- tied to L- when active
Ambient temperature <sup>2)</sup>	-25°C – 60°C
Humidity	0 – 100% RH non condensing
Degree of protection	IP 65
Maximum altitude	2000 m
BAT connector	MC4
DC microgrid connector	3 pos. push-in, max 6 mm <sup>2</sup>
<b>System design</b>	
Functionality <sup>1)</sup>	BAT and DC precharge, DC blackstart from BAT (50 W)
Measurement data	BAT and DC: voltage, current, energy, power
<b>Compliance</b>	
LVD	EN 62019-1, EN 62109-2
EMC	EN 61000-6-2, EN 61000-6-3
RoHS	Yes
Protection functions <sup>3)</sup>	BAT polarity fault, DC polarity fault, BAT short circuit, DC short circuit, Overtemperature, Residual current breaker (30 mA)

1) BAT voltage must always have min 20 V margin below DC voltage

2) Output power may be derated if ambient temperature exceeds 40°C

3) 30 mA residual current breaker is optional

