



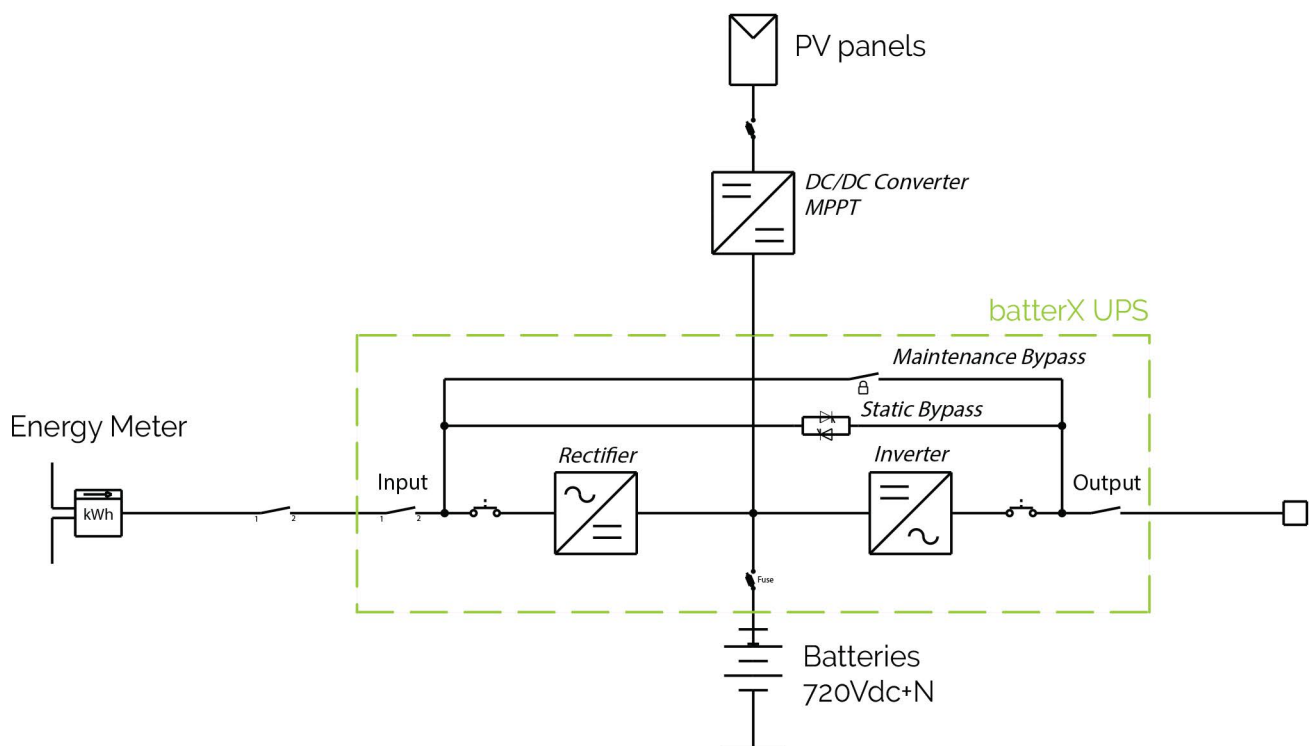
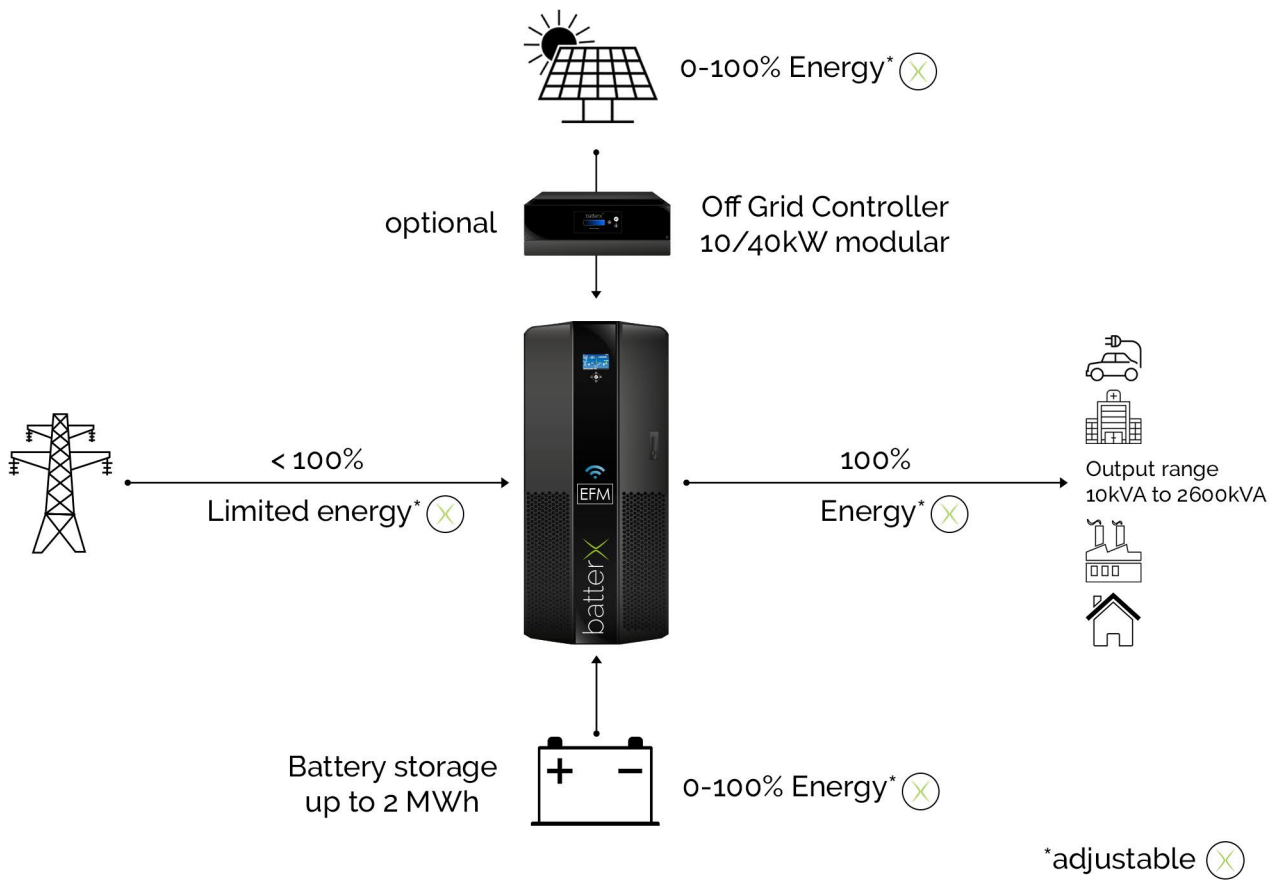
batterX[®] business series

GRID INDEPENDENT
UPS ENERGY STORAGE

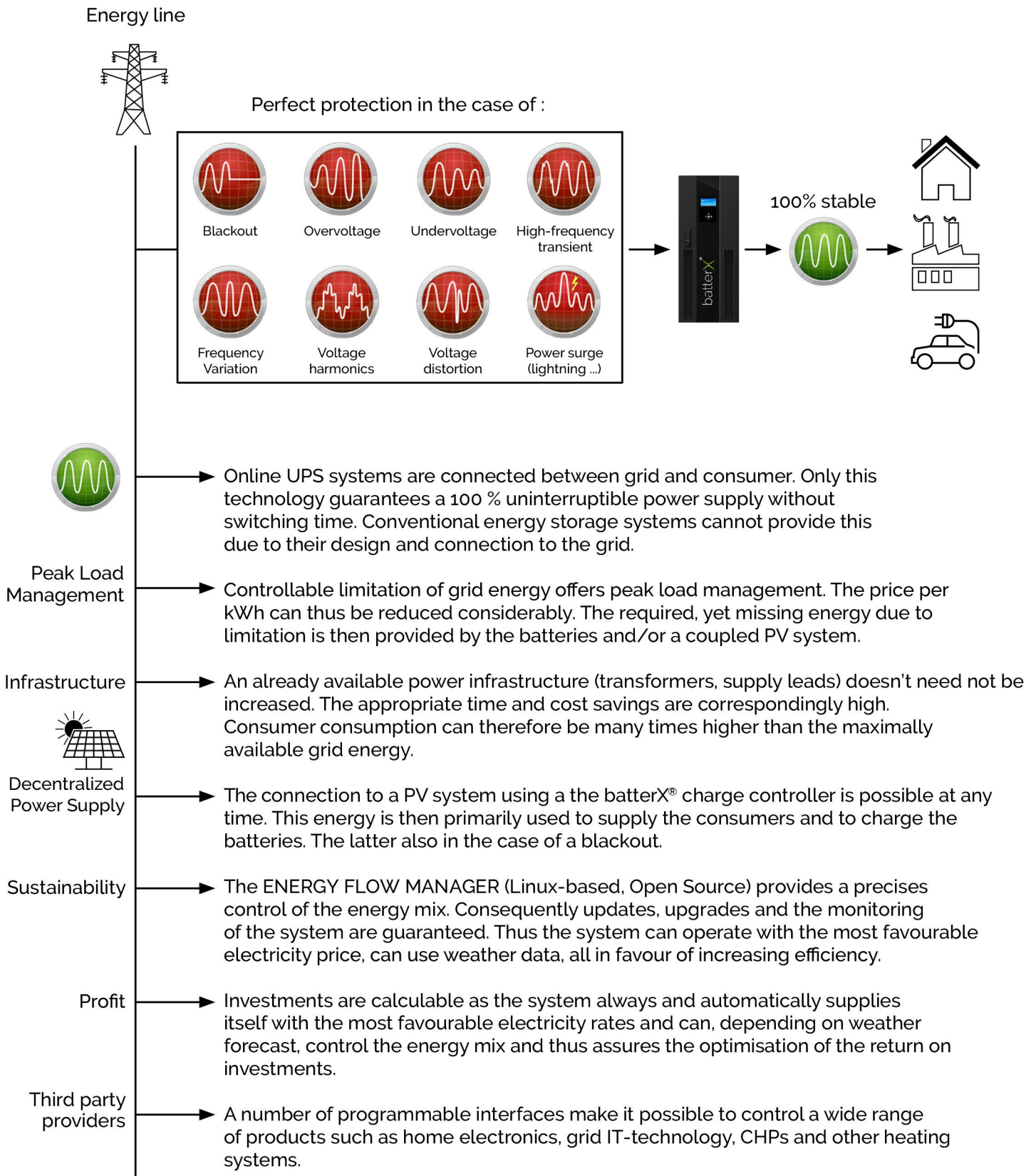
The central focus is a tall, black, vertical battery unit with a digital display at the top and the "batterX" logo on the front. It is connected to a smaller black unit at the bottom with a green "X" logo. Surrounding the battery are several images: solar panels, a modern house, a wind farm, an industrial plant with the text "100% STABLE Online UPS technology", a power substation, an electric vehicle charging station, and a server room. Green diagonal lines connect the battery to these various application areas.

100% STABLE
Online UPS technology

OPERATING PRINCIPLE



PROTECTION & PROFITS

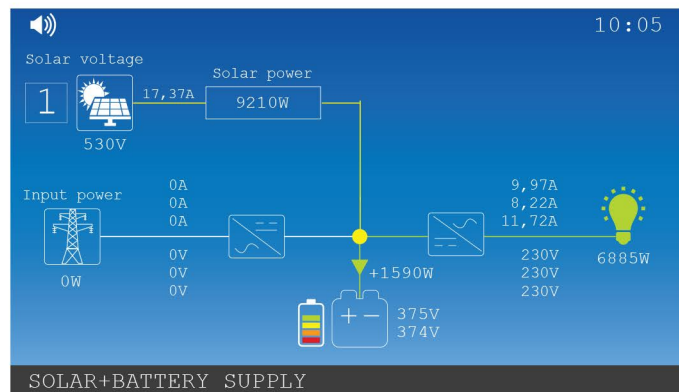


ENERGY MANAGEMENT

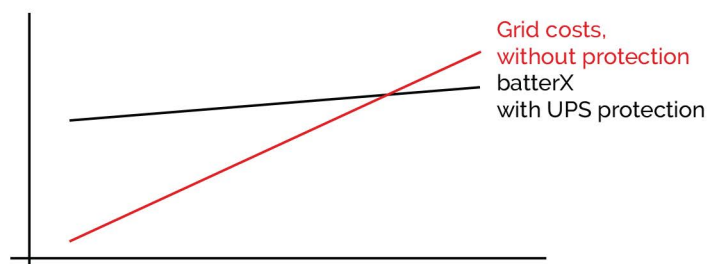
Energy Flow Manager
(Linux-based, Open Source)



Live screen
Remote control



RETURN OF INVESTMENT



Rentability and profit period according to geographic location, local legislation, energy price and sizing of the system

BATTERIES

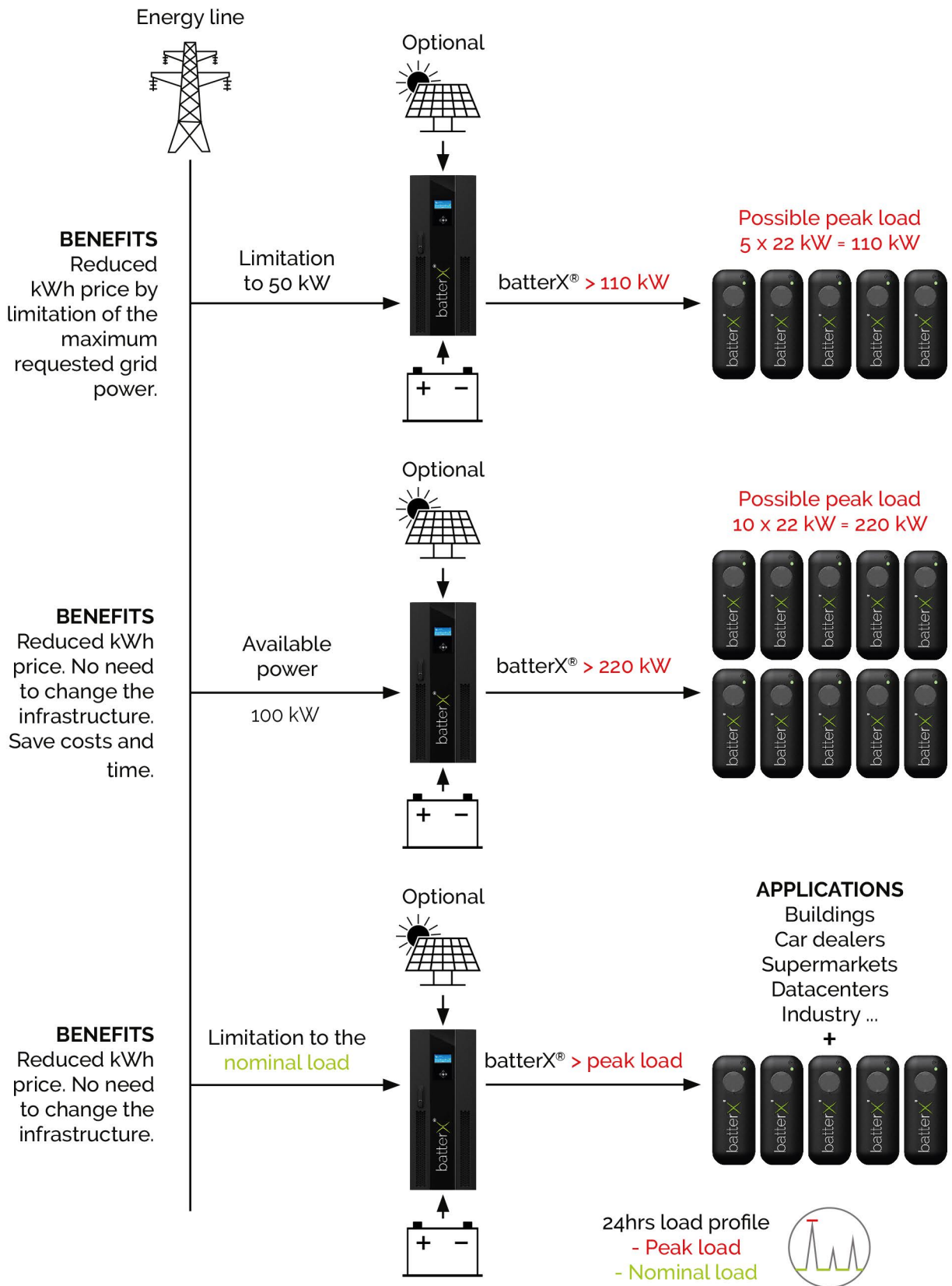


Project-based choice of your battery from several state-of-the-art technologies:

- Lead carbon, SPzS, LiFePo (Storage use)
- AGM (UPS use)

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EXAMPLE: CHARGING STATION



SPECIFICATIONS

	BAT10X	BAT15X	BAT20X	BAT30X	BAT40X	BAT60X	BAT80X	BAT100X	BAT120X	BAT160X	BAT200X	BAT250X	BAT300X	BAT400/500X										
Power (kVA)	10	15	20	30	40	60	80	100	120	160	200	250	300	400/500										
Input																								
Voltage	380/400/415Vac 3phase +N, +/-20% (415Vac +15% -25%)																							
Frequency range	50/60Hz selectable, +/-10Hz																							
Power factor	0,99																							
Harmonic distortion (THDi)	<3%																							
Additional bypass input	yes																							
Bypass voltage range	380/400/415Vac 3phase +N, +/-10%																							
Solar charge controller	yes - hybrid function																							
Output																								
Power factor	0,9																							
Power (kW)	9	13,5	18	27	36	54	72	90	108	144	180	225	270	360/400										
Voltage regulation	380/400/415Vac 3phase +N, +/-1% (220/230/240Vac for 10-30kVA)																							
Frequency	50Hz or 60Hz adjustable																							
Frequency regulation	line synchronized +/-2%, battery mode +/-0,1% adjustable																							
Efficiency	up to 94%																							
Crest factor	3:1																							
Overload protection	100-125% 10min, 125-150% 60sec																							
Additional protection	short circuit, voltage and current range																							
Harmonic distortion (THD)	<3% at 100% linear load																							
Battery																								
Type	VRLA AGM/GEL or other types																							
Nominal voltage	+/-360Vdc (2x30-12Vdc)																							
Float or end of discharge DC voltage	+/- 405Vdc, +/-300Vdc																							
Battery	internal							external																
Protection	overcharging, battery fuses, temperature compensation																							
Automatic test	daily, weekly (adjustable)																							
Hybrid Off-grid controller																								
Power	10 and 40kW (up to 8 units in parallel)																							
MPPT Input	270-640Vdc (40kW TBA)																							
Input min/max Voc	200Vdc / 800Vdc (40kW TBA)																							
Efficiency	≥97%																							
Communication	RS232, 4 dry contacts, EPO, multi language graphical LCD																							
Dimensions HxDxW / weight	10kW: 3Ux500x440mm/17kg (40kW TBA)																							
General																								
Standard & certificates	EMC/LVD/EMI - EN62040-1/2, EN60950, CE																							
UPS interface	multi language graphical LCD																							
Communication ports	2x RS232 ports, 4 dry contact (in option 8 dry contacts)																							
UPS Raspberry Pi Controller card	4 USB, HDMI, Ethernet, Micro SD card... 18 programmable IN/OUT interfaces, RS232, RS485																							
Input	Generator contact and emergency power off																							
Genset kit	User programmable																							
Software	Management software																							
Alarm	200 events (time and date) / in option 500 events																							
Protection	Over-temperature, over-current, over-temperature alarm																							
Temperature range	0°C - 40°C																							
Protection degree	IP20 (IP54 optional)																							
Humidity / Altitude	90% max without condensation / < 1000m																							
Audible noise at 1m	≤ 56dB			≤ 61dB			≤ 64dB			≤ 67dB			≤ 72dB											
Weight (kg)	86		92		98		175		182		196		218		259		480		560		650		770	
Dimensions (mm), HxWxD	1037x398x812					1437x513x852					1797x882x763					1797x1246x763								