BYD BATTERY-BOX

EFT-Systems GmbH

Contenido

- Almacenamiento energético: Potencial en el Mercado
- BYD
  - Battery Box Premium
    - Química
    - La batería más flexible
    - Disponible para cualquier aplicación
    - Fácil instalación
    - Servicio y soporte

ALMACENAMIENTO
POTENCIAL

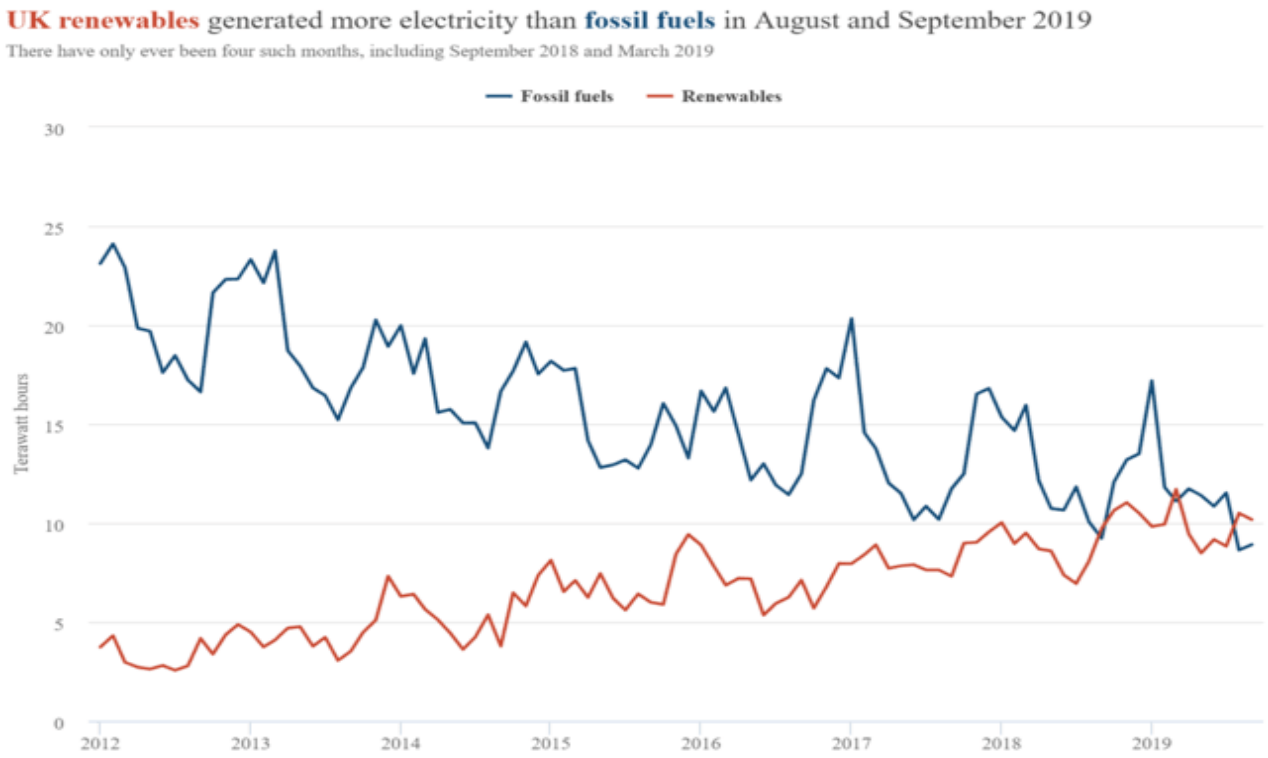
BATTERY BOX

HACIA UN MUNDO DE 0 EMISIONES

El mercado de almacenamiento mundial crecerá desde los 4GW desplegados en 2019 a más de 15GW en 2024 (Wood Mackenzie)

.

"**Un mayor reconocimiento del valor del almacenamiento, en lugar del coste, será el factor clave para determinar el crecimiento**"



Razones medioambientales y **económicas**:

2019 escala utility

Solar+Batería: **30$/MWh**

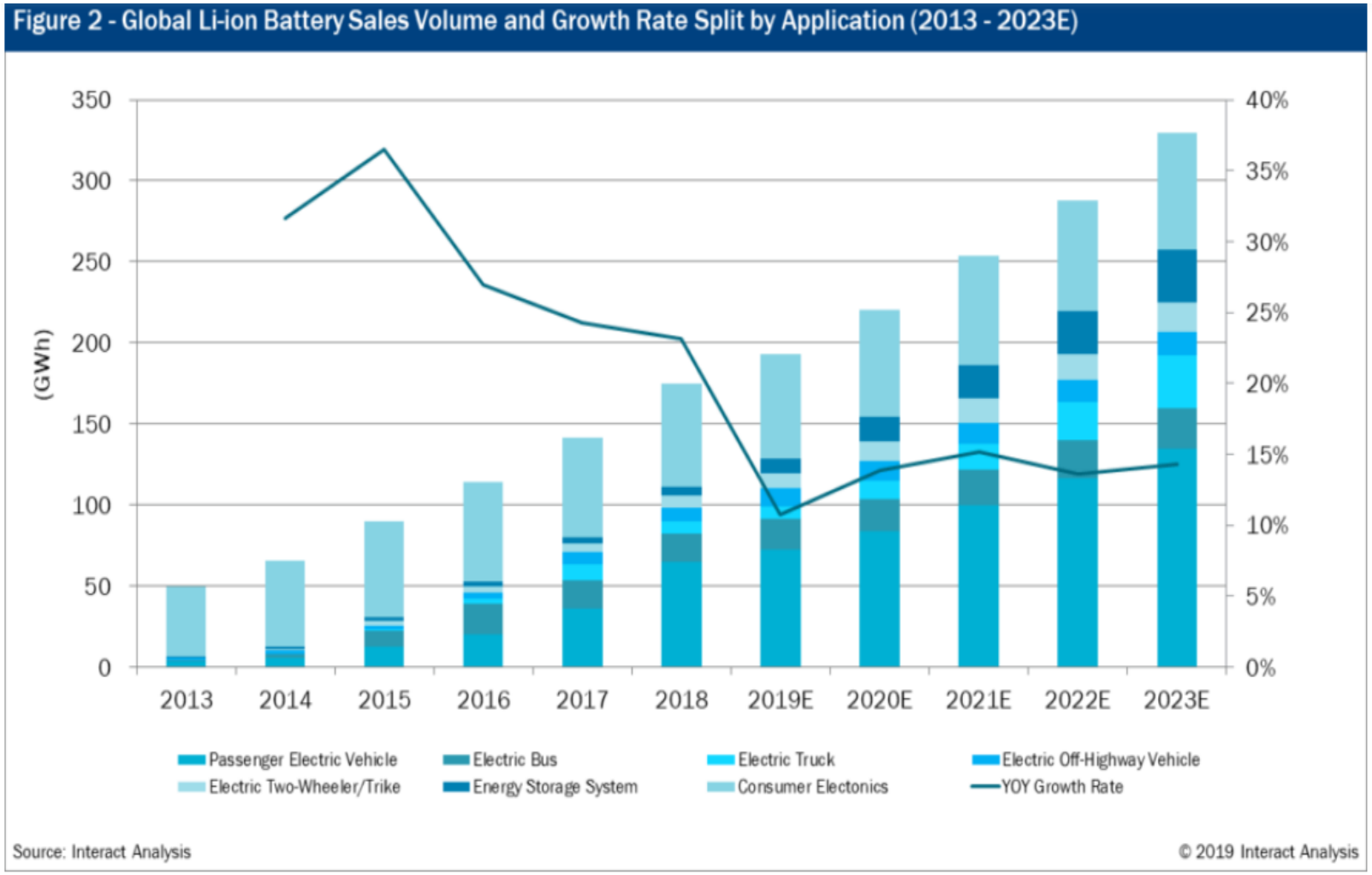
Gas Peaker: **41$/MWh**

Navigant Research 2020

BATTERY BOX

HACIA UN MUNDO DE 0 EMISIONES

- Electrificación de la movilidad
- Preocupaciones ambientales
- Seguridad Energética
- Viabilidad económica de la tecnología



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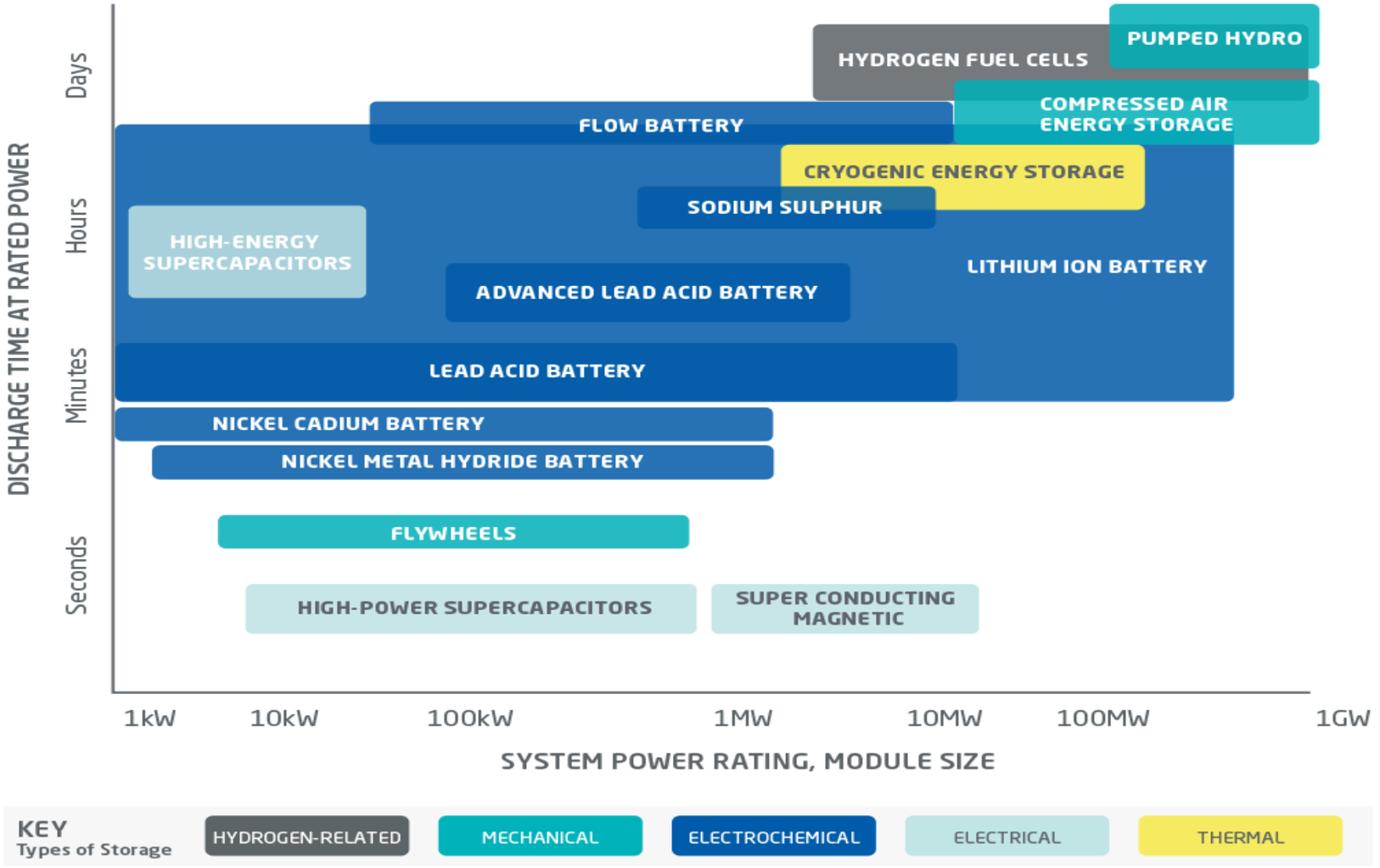
¿POR QUÉ LITIO?

- Seguridad
- Gran rango de aplicaciones
- Viabilidad económica
- Viabilidad tecnológica



BATTERY BOX

AUGE DEL AUTOCONSUMO

"El consumo de energía eléctrica proveniente ***de instalaciones de generación conectadas en el interior de una red de un consumidor*** *o a través de una línea directa de energía eléctrica asociadas a un consumidor"*

El autoconsumo ha experimentado un notable despliegue en **España**, en total hay casi 1GW instalados. Datos de 2019 de UNEF:

- 2018 → 235MW
- 2019 → 459MW: **10% aisladas**, 90% red. Por sectores: 50% industrial, **20-30% comercial**, **10-20% residencial**

BATTERY BOX

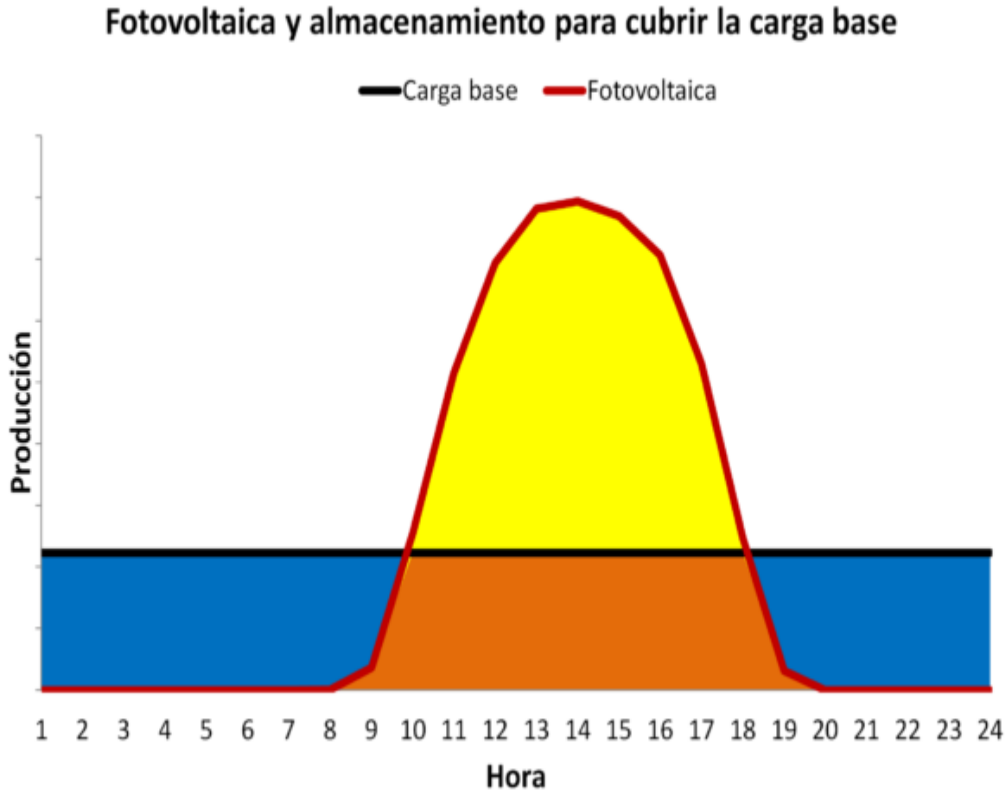
AUGE DEL AUTOCONSUMO

"*Almacenamiento es factor clave en la* ***gestión de producción*** *renovable y es fundamental en la transición energética*"

Instalación fotovoltaica produce **solo en las horas de irradiación solar**. **Energía excedentaria almacenarla** y utilizarla en los momentos del día donde sea más rentable.

La decisión de colocar almacenamiento o no depende del **perfil del consumo** (Residencial vs. Industrial).

1. Eficiencia y consumos
2. Solar
3. Almacenamiento - Compensación: Término de energía + máximo consumo de energía. Cálculo económico.



La producción fotovoltaica que supere la **carga base** (en amarillo) se deberá **almacenar para cubrir la demanda durante el resto de horas** sin producción fotovoltaica (en azul).

BATTERY BOX

SISTEMA PRIVADO DE EMISIONES CERO - MOVILIDAD

SISTEMA PRIVADO DE EMISIONES CERO - MOVILIDAD

- Ventas de **VE** puros subieron un 120% en enero y un 100% en febrero, hasta alcanzar las 6.000 unidades, cerca de un 2% de las ventas totales de vehículos.
- Objetivos del Ministerio de Transición fijan para **2020**: **65.000 unidades** matriculadas de VE de todo tipo (x2.5 las 24.000 matriculaciones de 2019).
- Para **2030**: **2,5 millones** de turismos eléctricos

¿Puede generar energía para cubrir sus necesidades de movilidad?

Modelo	ADAC Ecotest en kWh/100 km
Hyundai Ioniq Elektro Style	14,7
VW e-Golf	17,3
VW e-up!	17,7
BMW i3 (120 Ah)	17,9
Smart Fortwo Coupé EQ Prime	18,3
Opel Ampera-e First Edition	19,7
Renault Zoe Intens (41 kWh)	20,3
Tesla Model 3 Long Range AWD	20,9

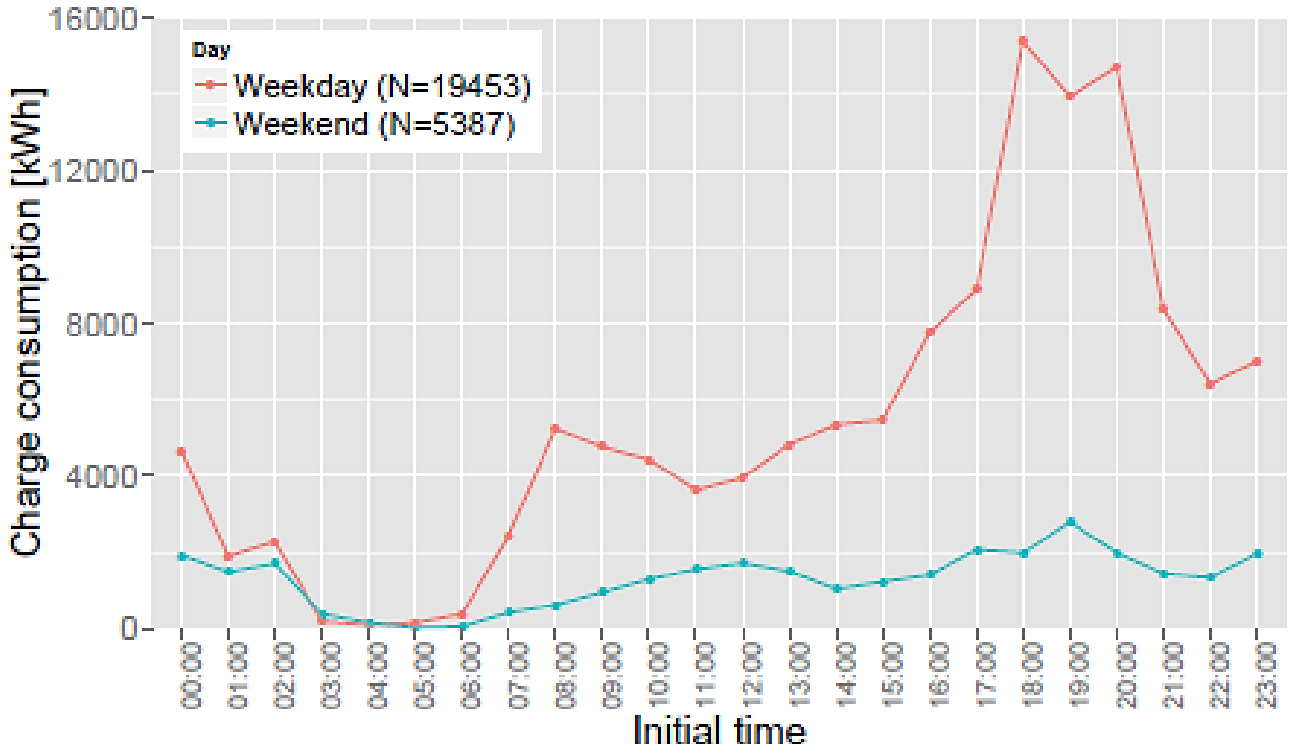
https://www.adac.de/rund-ums-fahrzeug/tests/elektromobilitaet/stromverbrauch-elektroautos-adac-test/

¿Cuánto produce su hogar?

BATTERY BOX

SISTEMA PRIVADO DE EMISIONES CERO - MOVILIDAD

¿Es la energía producida cuando tenemos que cargar el VE?



Horario de carga de VE a lo largo de la semana.
Quelle: Green eMotion. Deliverable D1.10, European global analysis on the electro-mobility performance, Version 2.0. IREC, 2017.

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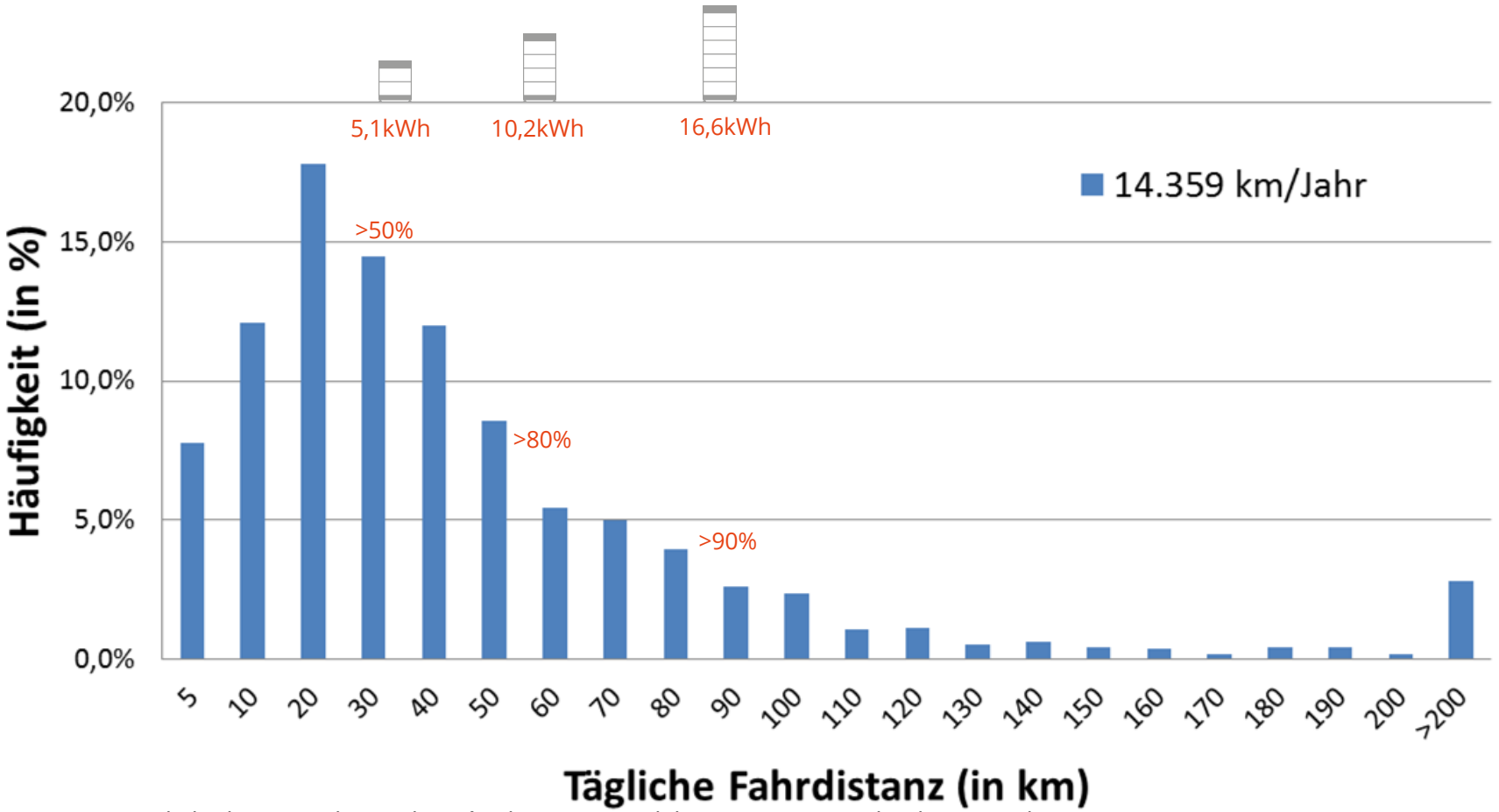
SISTEMA PRIVADO DE EMISIONES CERO - MOVILIDAD

¿Es el almacenamiento residencial suficiente para cargar mi VE?



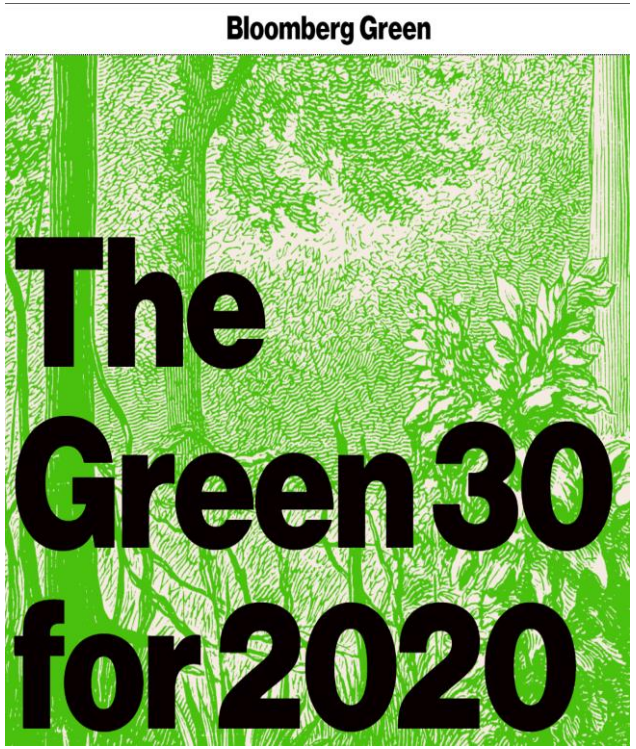
Frecuencia de la distancia de conducción diaria con un kilometraje promedio de 14.359 km / año.
Source: DLR & Infas. Mobility in Germany (MiD) 2008. In: Federal Ministry of Transport Building and Urban Development. Bonn / Berlin: BMVBS, 2010

BATTERY BOX

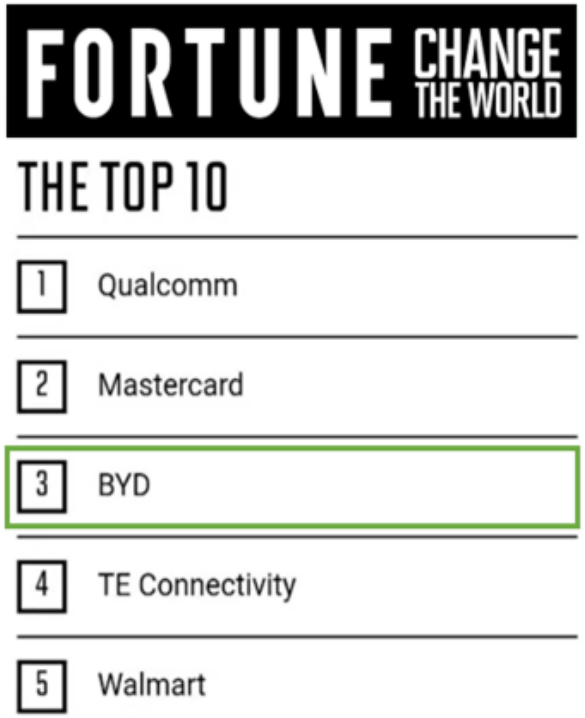
BYD

BATTERY BOX

BYD - CAMBIANDO EL MUNDO



https://www.bloomberg.com/features/2020-green-30/



https://fortune.com/change-the-world/

https://www.youtube.com/watch?v=OmkQVplZn18&feature=youtu.be

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LÍDER MUNDIAL EN MOVILIDAD ELÉCTRICA

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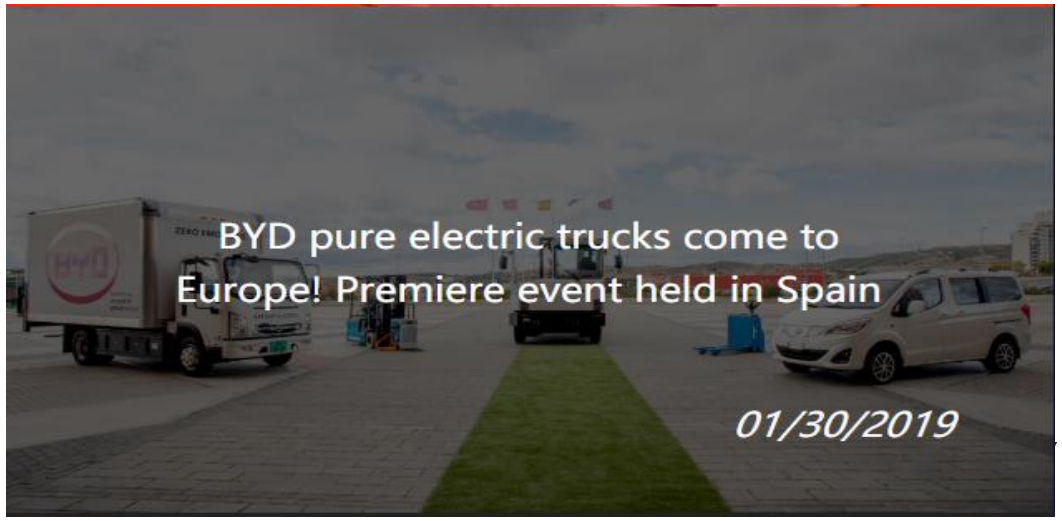
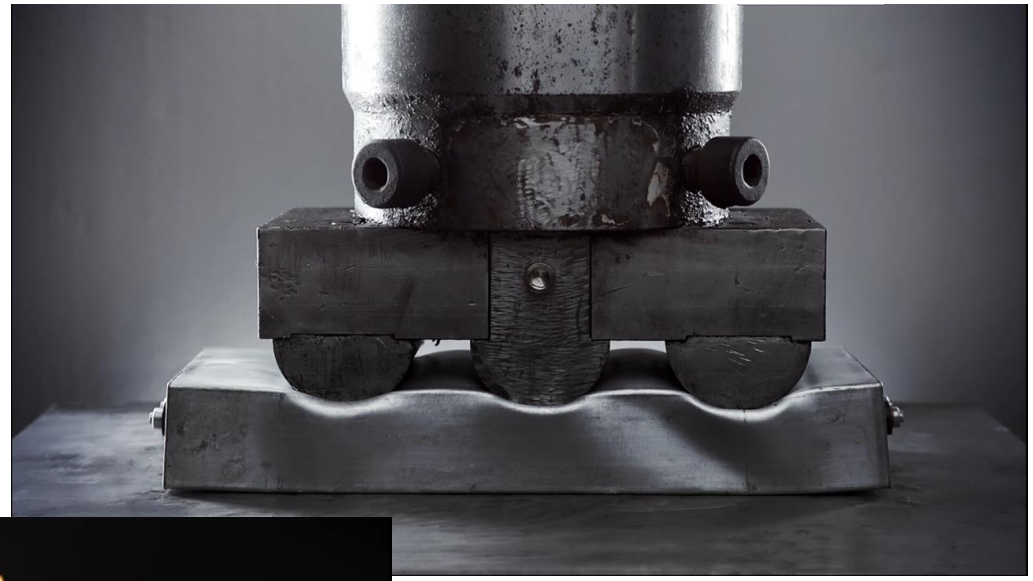


BATTERY BOX
PREMIUM

BATTERY BOX

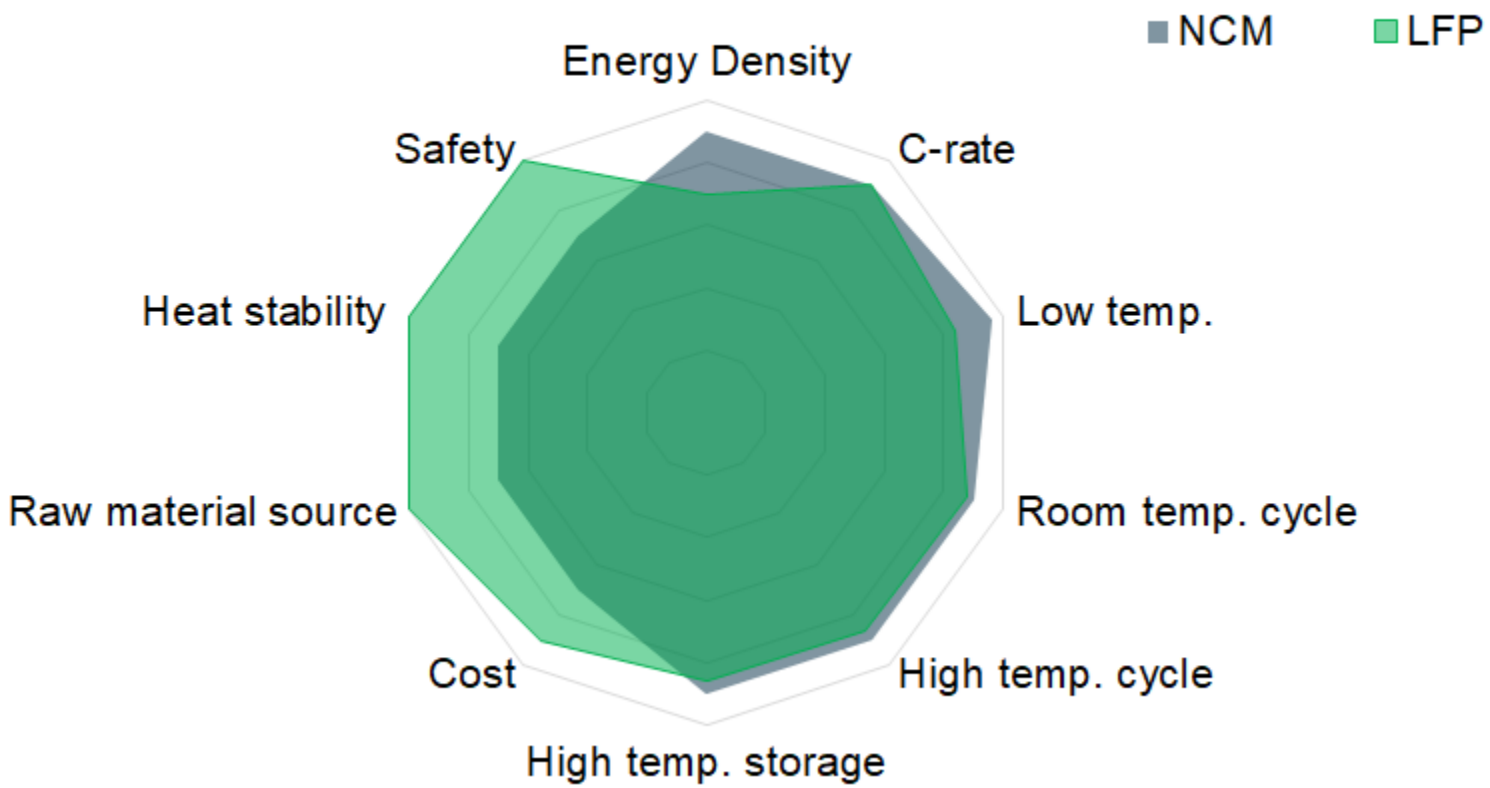
SEGURIDAD Y CONFIANZA



LFP vs LMO safety test

BATTERY BOX

LFP vs. NCM

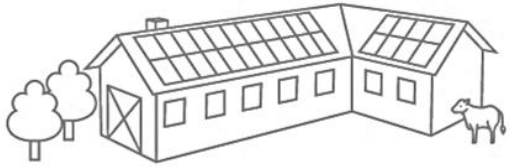


BATTERY BOX

ESCALABILIDAD

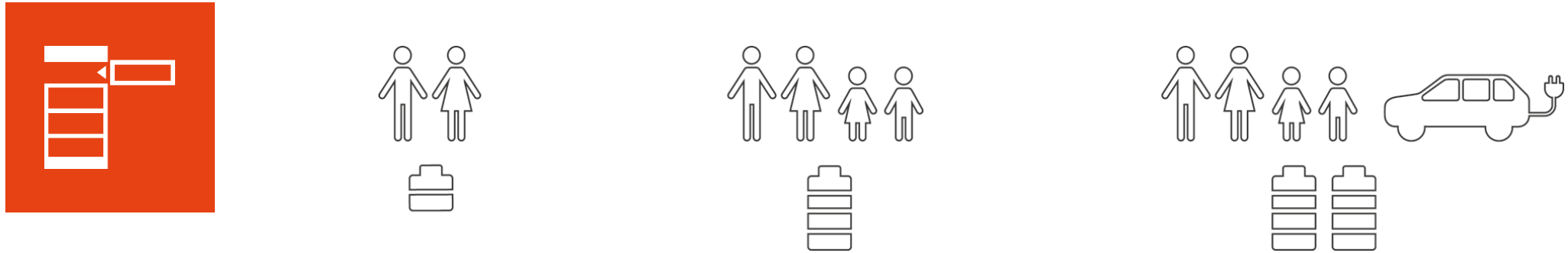
BATTERY BOX

PARA CUALQUIER APLICACIÓN



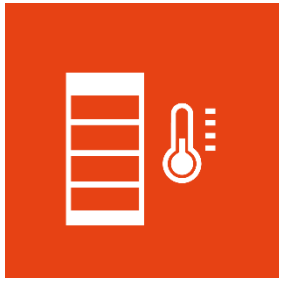
BATTERY BOX

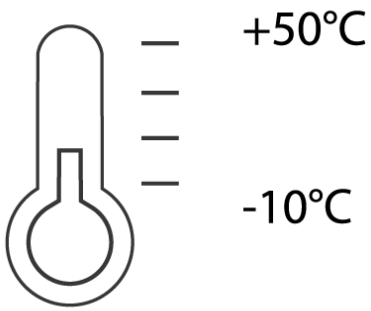
EXTENSIÓN DE CAPACIDAD EN CUALQUIER MOMENTO



BATTERY BOX

AMPLIO RANGO DE TEMPERATURA DE TRABAJO

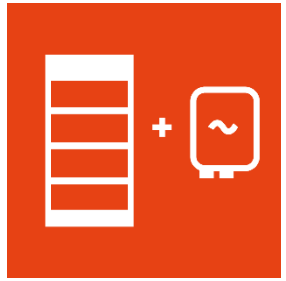




HV / LV

BATTERY BOX

COMPATIBLE CON INVERSORES LÍDERES



KOSTAL

Fronius

victron energy
BLUE POWER

SMA

GOODWE
your solar engine

SUNGROW

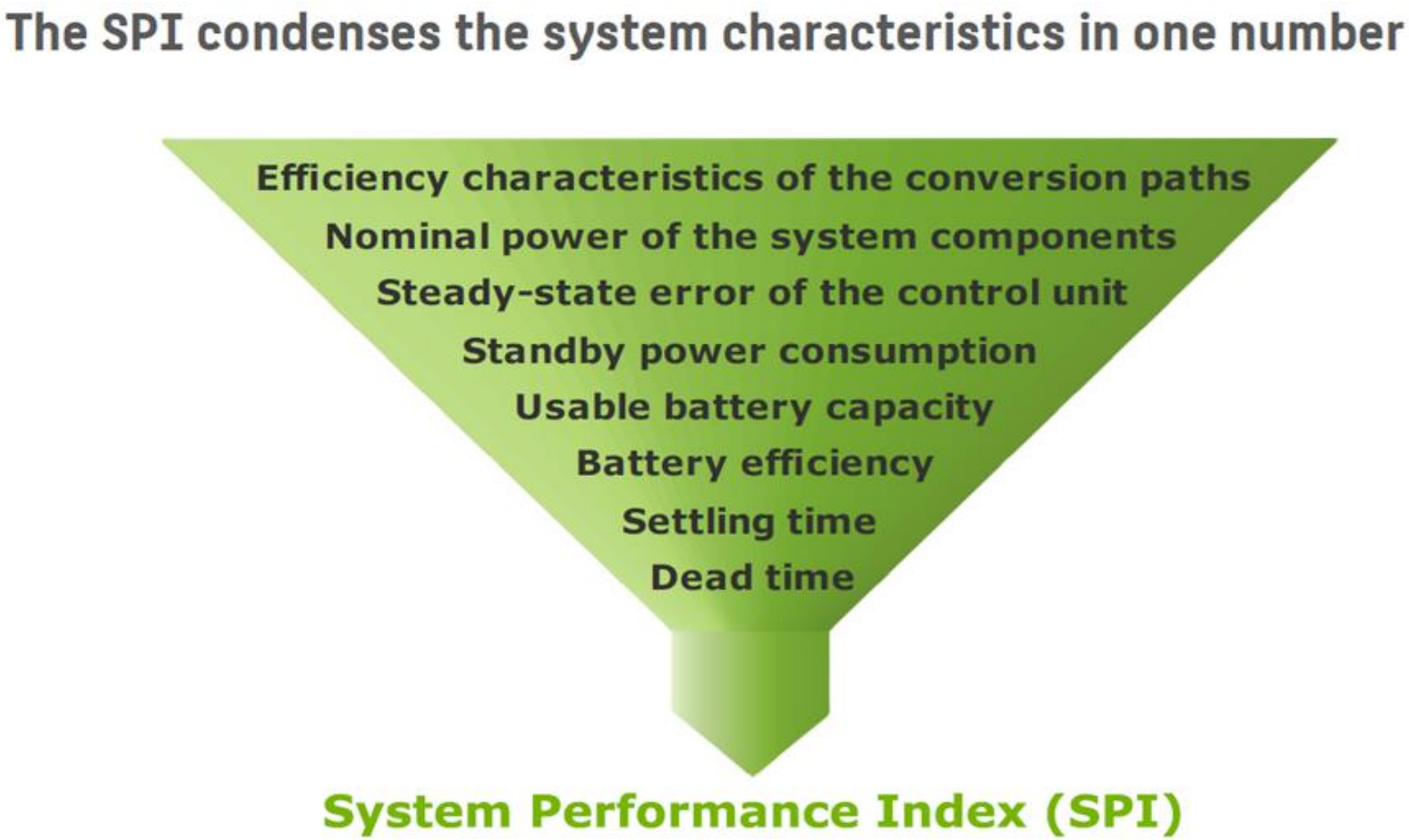
solaredge

STUDER

solis
inverters

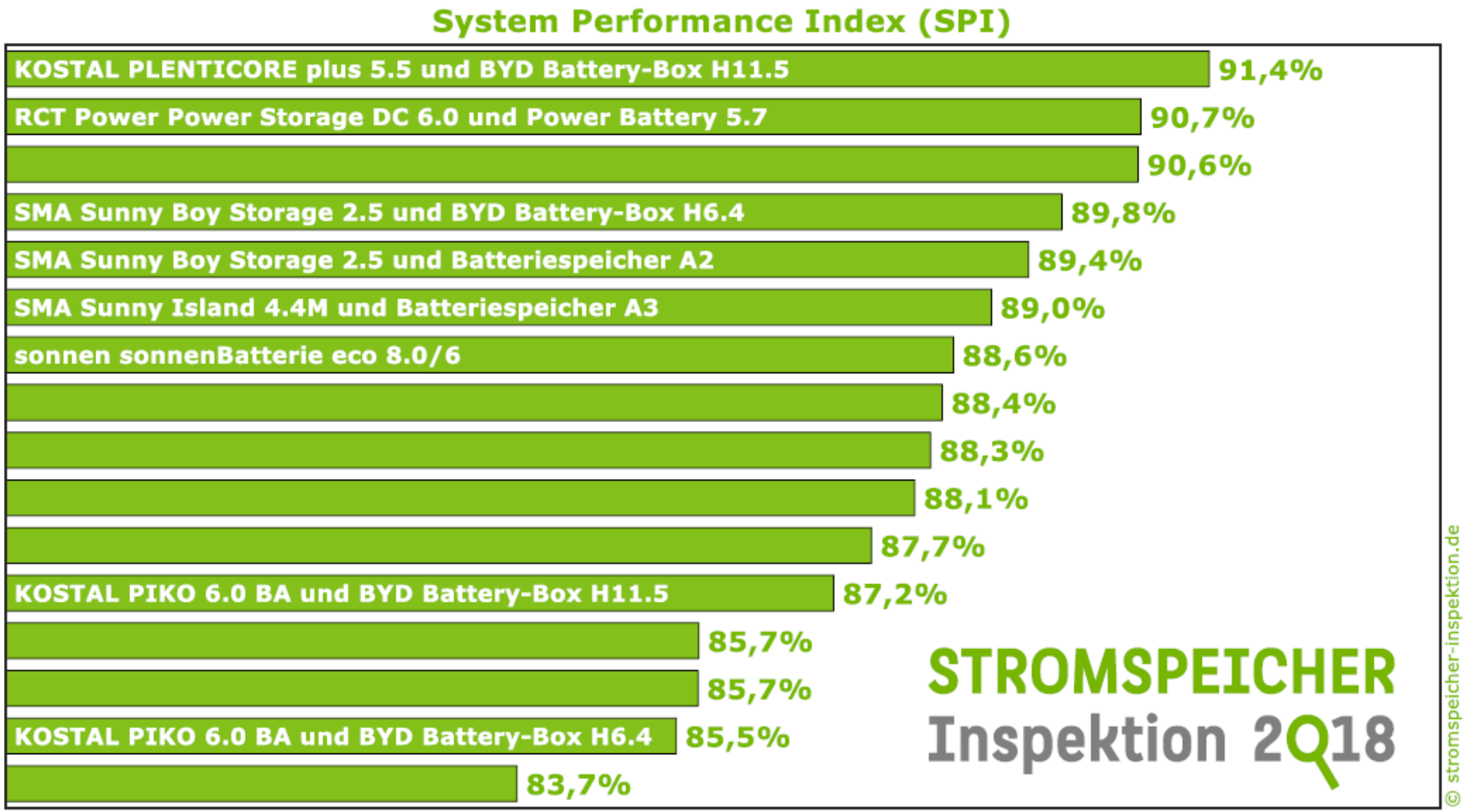
BATTERY BOX

RENDIMIENTO TOP - SPI TEST



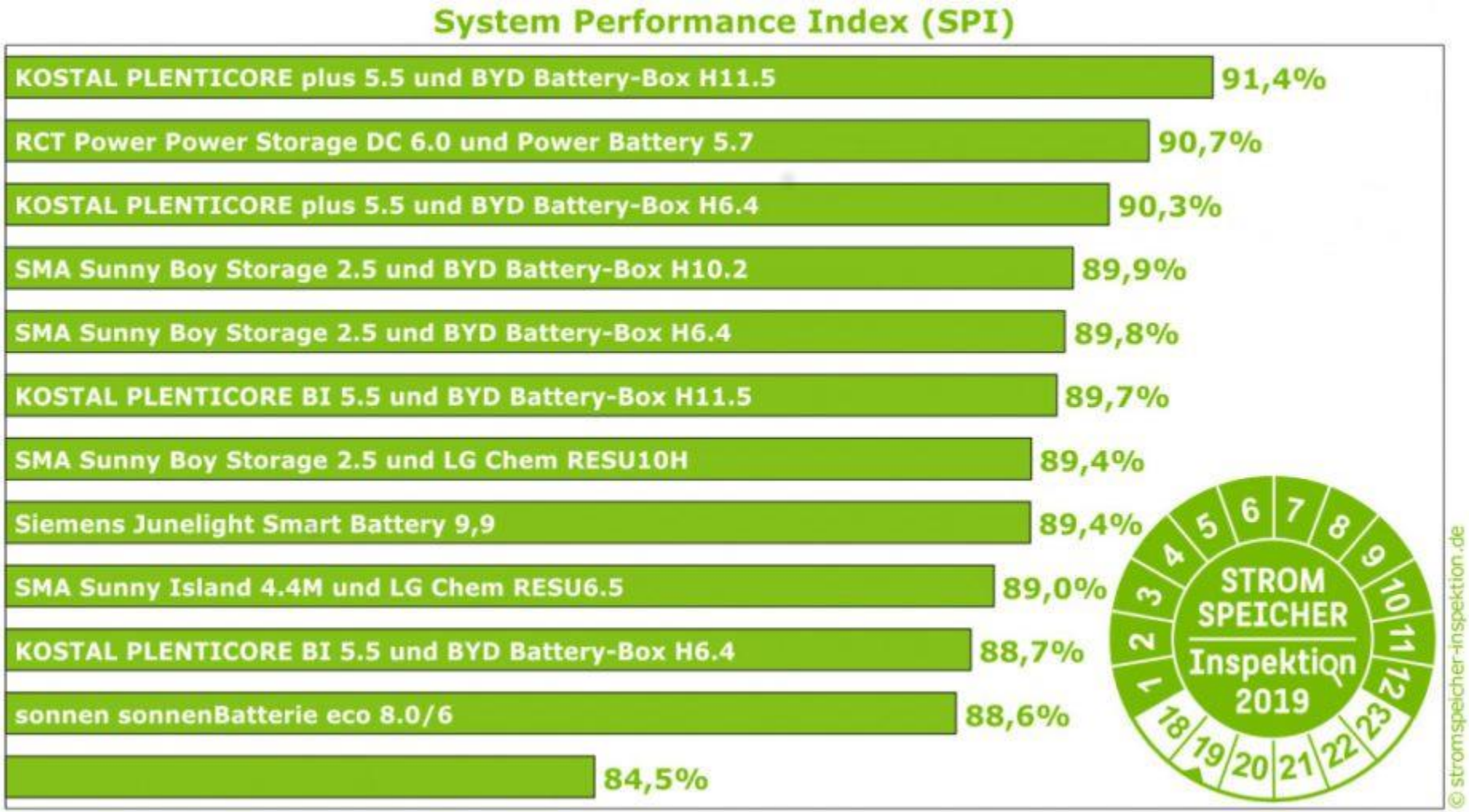
BATTERY BOX

RENDIMIENTO TOP - SPI TEST

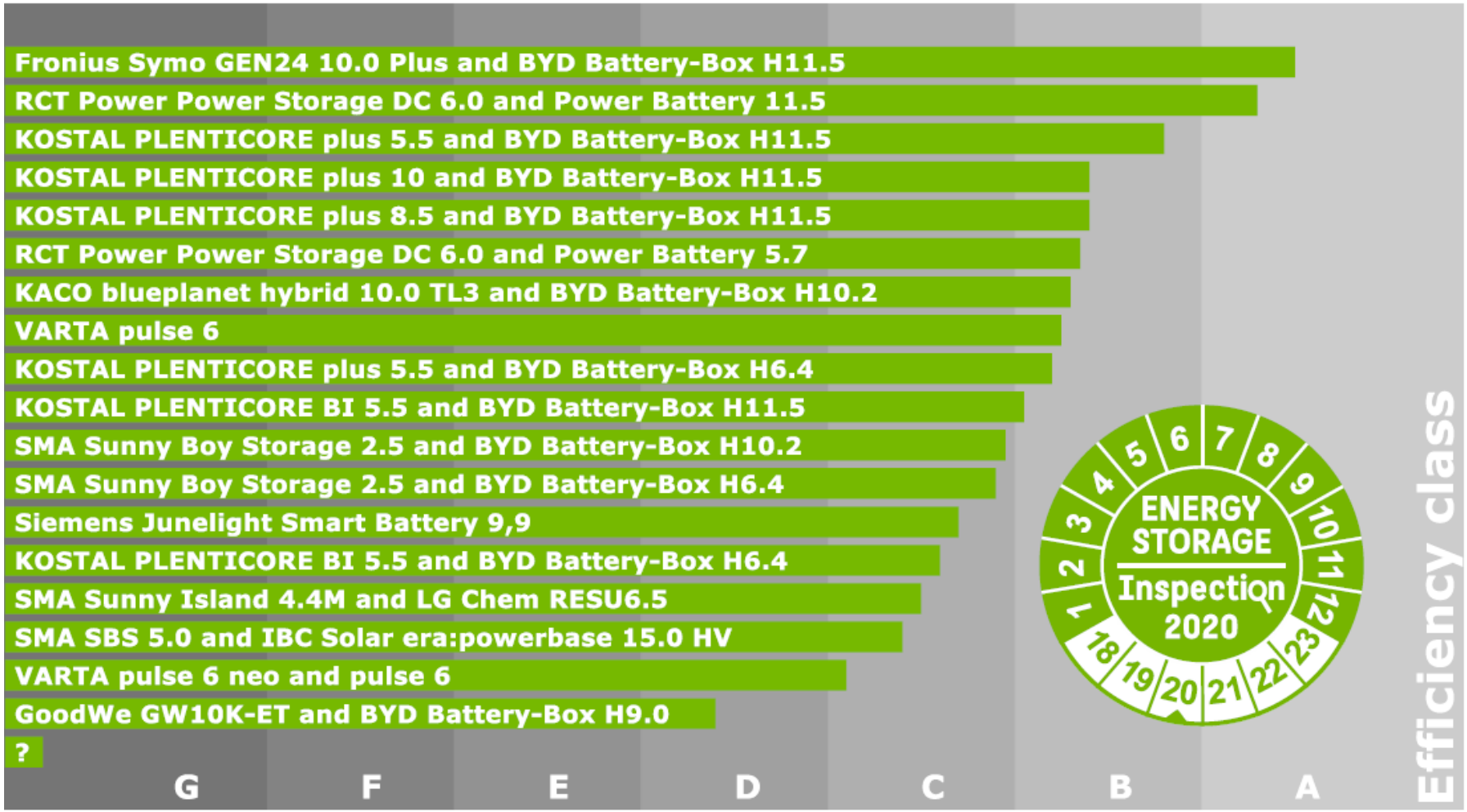


BATTERY BOX

RENDIMIENTO TOP - SPI TEST



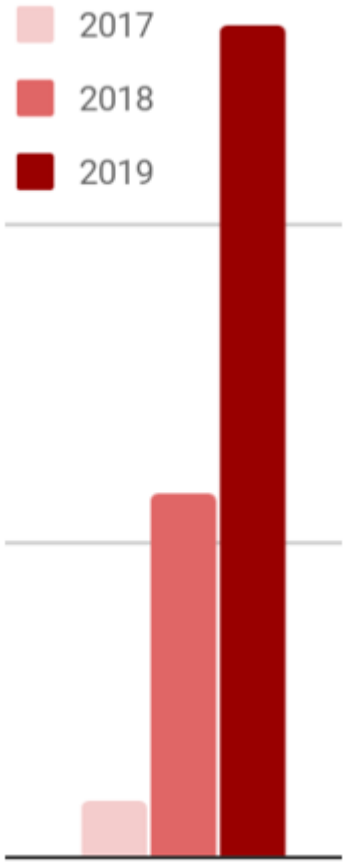
RENDIMIENTO TOP - SPI TEST



The efficiency classification is based on the System Performance Index SPI (5 kWp) and SPI (10 kWp).

BATTERY BOX

¿POR QUÉ UNA NUEVA VERSIÓN?



- Mayor capacidad de producción
- Incorporar feedback del mercado
- Nuevos estándares de seguridad (e.g. VDE2510-50)
- Mayor stock disponible
- Info instaladores + Newsletter

BATTERY BOX

NUEVA GAMA

HVS / HVM

LVS

LVL

BATTERY BOX

¿QUÉ ES NUEVO? PRODUCCIÓN

El mayor y más avanzado centro de producción de módulos del sector
Produce **10 veces más el número de sistemas de 2019**

BATTERY BOX

¿QUÉ ES NUEVO? DISEÑO UNIVERSAL

BATTERY BOX

¿QUÉ ES NUEVO? MEJORAS

Diseño más compacto
- más kWh en menos espacio
- menos espacio requerido para instalación

Comprobación visual del estado
- indicador LED

Instalación más sencilla
- área específica para cableado
- ensamblaje de módulos más eficaz

Mejor capacidades técnicas
- certificado de segudirad VDE2510
- lectura de SOC mejorada
- mejor desempeño a bajas temperaturas

Extensión más sencilla
- conexión directa
- mayor posibilidad de expansión en kWh

Embalaje optimizado
- menos plástico, más manejable

Usabilidad coherente
- misma interfaz para toda la gama

BATTERY BOX

GUÍA COMPARATIVA DE REEMPLAZO

BATTERY-BOX

HV 200-450V

LV 48V

PRO 2.5-10.0 48V

PRO 13.8 48V

BATTERY-BOX PREMIUM

HVS 200-500V

2,56 kWh / module
5,1-38.4 kWh

HVM 150-400V

2,76 kWh / module
8,3-66,2 kWh

LVS 48V

3,84 kWh / module
3,8-245 kWh

LVL 48V

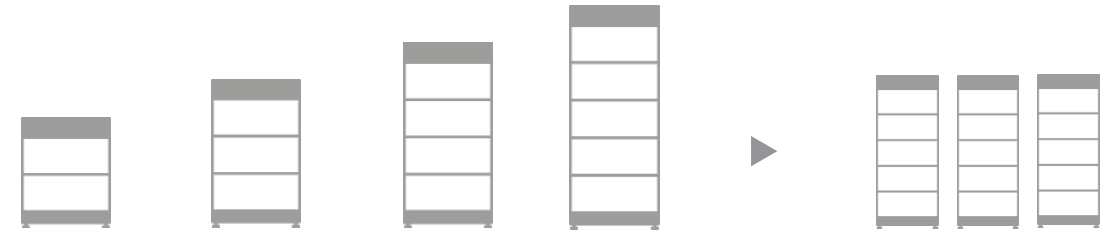
15,36 kWh / module
15,4 - 983 kWh

BATTERY BOX

MÁXIMA
FLEXIBILIDAD

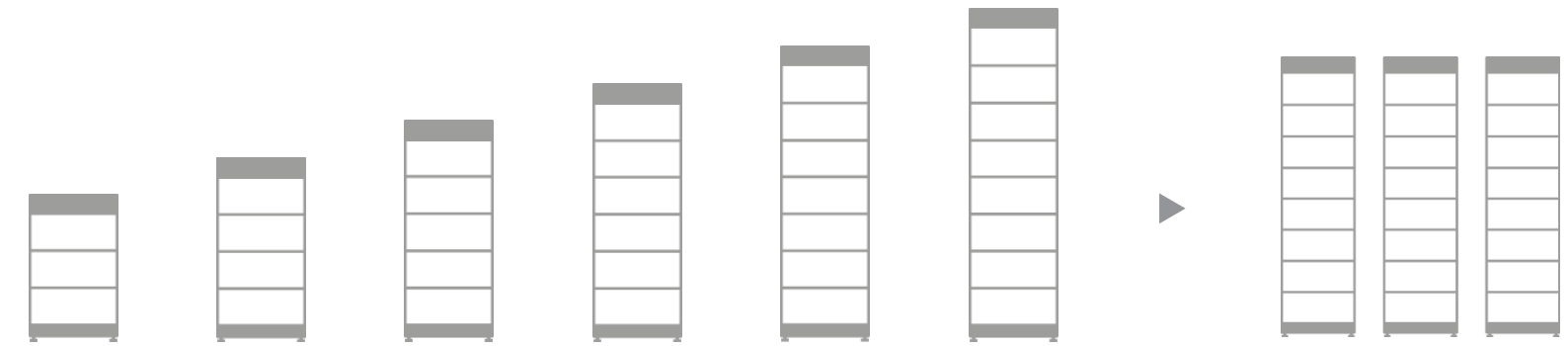
BATTERY BOX

HVS / HVM



HVS 5.1 HVS 7.7 HVS 10.2 HVS 12.8

3 x HVS 12.8



HVM 8.3 HVM 11.0 HVM 13.8 HVM 16.6 HVM 19.3 HVM 22.1

3 x HVM 22.1

BATTERY BOX

DATASHEET HVS




	HVS 5.1	HVS 7.7	HVS 10.2	HVS 12.8
Módulo	HVS (2.56 kWh, 102.4 V, 38 kg)			
Número de módulos	2	3	4	5
Energía Utilizable [1]	5.12 kWh	7.68 kWh	10.24 kWh	12.8 kWh
Máx. Corriente de Salida [2]	25 A	25 A	25 A	25 A
Corriente de salida pico [2]	50 A, 5 s	50 A, 5 s	50 A, 5 s	50 A, 5 s
Voltaje Nominal	204 V	307 V	409 V	512 V
Voltaje Operativo	160~240 V	240~360 V	320~480 V	400~600 V
Dimensiones (H/W/D)	712x585x298 mm	945x585x298 mm	1178x585x298 mm	1411x585x298 mm
Peso	91 kg	129 kg	167 kg	205 kg

BATTERY BOX

DATASHEET HVM

	HVM 8.3	HVM 11.0	HVM 13.8	HVM 16.6	HVM 19.3	HVM 22.1
Módulo	HVM (2.76 kWh, 51.2 V, 38 kg)					
Número de módulos	3	4	5	6	7	8
Energía Utilizable [1]	8.28 kWh	11.04 kWh	13.80 kWh	16.56 kWh	19.32 kWh	22.08 kWh
Máx. Corriente de Salida [2]	50 A	50 A	50 A	50 A	50 A	50 A
Corriente de salida pico [2]	75 A, 5 s	75 A, 5 s	75 A, 5 s	75 A, 5 s	75 A, 5 s	75 A, 5 s
Voltaje Nominal	153 V	204 V	256 V	307 V	358 V	409 V
Voltaje Operativo	120~180 V	160~240 V	200~300 V	240~360 V	280~420 V	320~480 V
Dimensiones (H/W/D)	945 x 585 x 298 mm	1178 x 585 x 298 mm	1411 x 585 x 298 mm	1644 x 585 x 298 mm	1877 x 585 x 298 mm	2110 x 585 x 298 mm
Peso	129 kg	167 kg	205 kg	243 kg	281 kg	319 kg

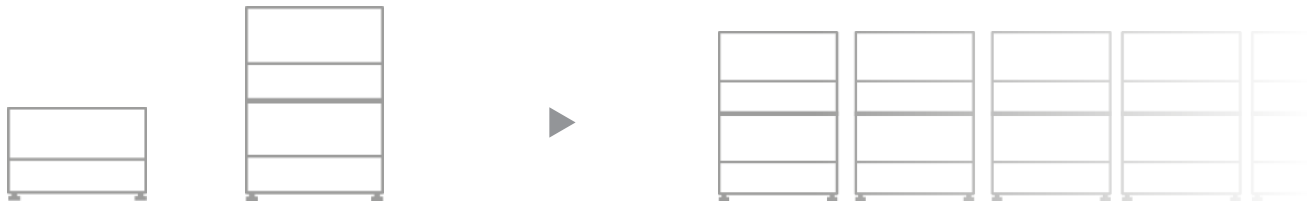
BATTERY BOX

HVS / HVM CAMBIOS

	HV	HVS	HVM
Patentado Plug-In Design sin Cables	✓	✓	✓
ON-Grid & Backup	✓	✓	✓
OFF-Grid	✗	✓	✓
Módulo	1.28 kWh 580x380x120mm, 26 kg, 51.2 V	2.56 kWh 585x298x238mm, 38 kg, 102.4 V	2.76 kWh 585x298x238mm, 38 kg, 51.2 V
Comparativa dimensiones	H10.2: 580 x 380 x 1254 mm	HVS 10.2: 585 x 298 x 1178 mm	HVM 11.0: 585 x 298 x 1178 mm
Indicador LED luminoso de estado	✗	✓	✓
Rango de Capacidad	5.1 – 11.5 kWh	5.1 – 12.8 kWh Paralelo directo 3 sist.: 38.4 kWh	8.3 – 22.1 kWh Paralelo directo 3 sist.: 66.2 kWh
Estándares de Seguridad	IEC62619 / CE / RCM / UN38.3	VDE2510-50 / IEC62619 / CEC / CE / UN38.3	VDE2510-50 / IEC62619 / CEC / CE / UN38.3
Cableado al inversor	Abrir completamente la BCU para acceder a puertos de cableado	Area específica dedicada a conexiones	Area específica dedicada a conexiones
Puerto de comunicación con inversor	PINs	PINs / Cable Ethernet	PINs / Cable Ethernet
Encamblaje entre módulos	Gancho	Tornillo	Tornillo
Derating de corriente de carga	A +10 °C	A +5 °C	A +5 °C

BATTERY BOX

LVL



LVL 15.4

2 x LVL 15.4

64 x LVL 15.4

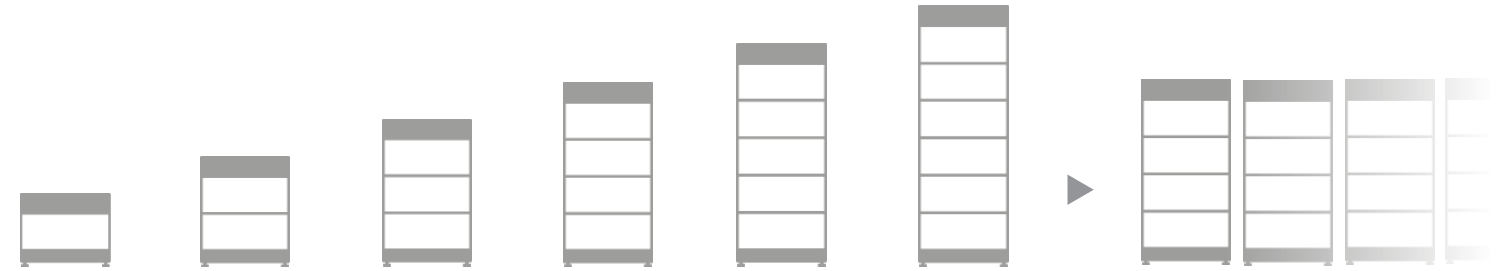
BATTERY BOX

LVL CAMBIOS

	PRO 13.8	LVL
Control/Servicio Remoto	✗	✓
ON-Grid & Backup	✓	✓
OFF-Grid	✓	✓
Dirección de baterías automática	✗	✓
Dimensiones	650 x 550 x 800 mm	500 x 660 x 575 mm
Rango de capacidad	13.8 kWh Hasta 32 en parlelo: 442 kWh	15.4 kWh Hasta 64 en paralelo: 983 kWh
Apilable	✗	✓ Hasta dos sistemas
Derating de correinte de carga	A +12 °C	A +5 °C

BATTERY BOX

LVS



LVS 4.0 LVS 8.0 LVS 12.0 LVS 16.0 LVS 20.0 LVS 24.0 16 x LVS 16.0

BATTERY BOX

LVS CAMBIOS

	LV	PRO 2.5-10.0	LVS
Patentado Plug-In Design sin Cables	✓	✗	✓
ON-Grid & Backup	✓	✓	✓
OFF-Grid	✗	✓	✓
Módulo	3.50 kWh 42 kg, 51.2 V	2.56 kWh 40 kg, 51.2 V	4.00 kWh 64 kg, 51.2 V
Comparativa dimensiones	L10.5: 620 x 340 x 947 mm	PRO10.0: 600 x 510 x 883 mm	LVS 11.5: 640 x 298 x 923 mm
IP 55	✓	✗	✓
Rango de Capacidad	3.5 – 14 kWh Paralelo directo 3 sist: 42 kWh	2.56 – 10.24 kWh Paralelo directo 10 sist: 81 kWh	4.00 – 24.00 kWh Paralelo hasta: 256 kWh
Derating correinte de carga	A +12 °C	A +12 °C	A +5 °C

BATTERY BOX

PARA CUALQUIER APLICACIÓN

BATTERY BOX

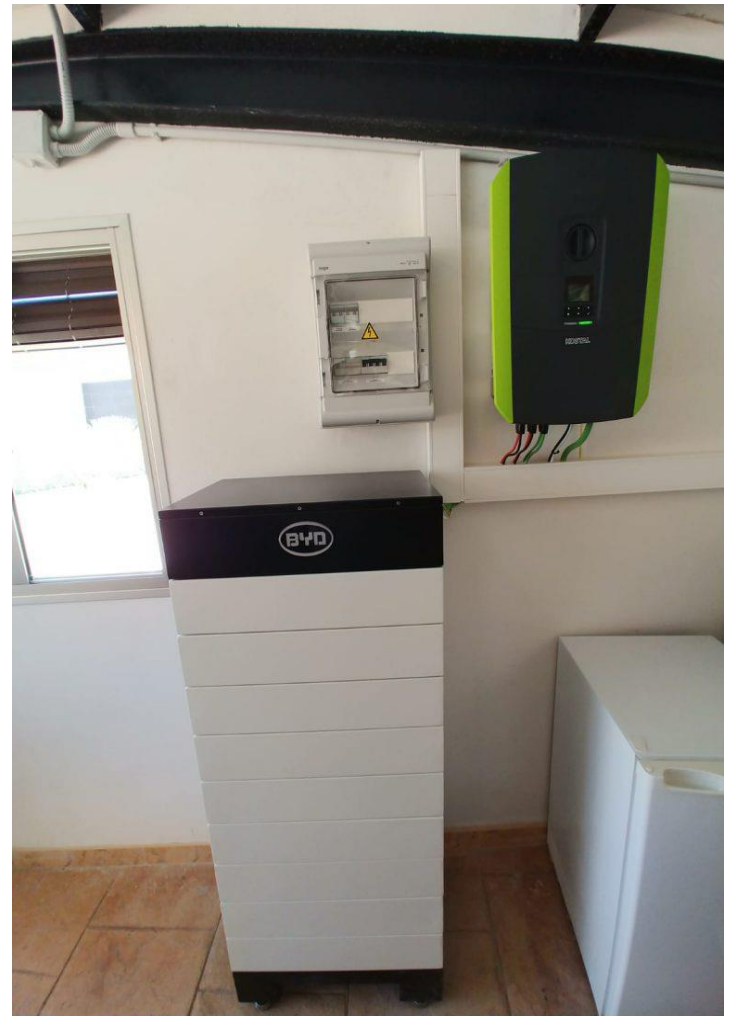
Residencial Pequeño On-Grid

BATTERY BOX

Residencial Pequeño On-Grid

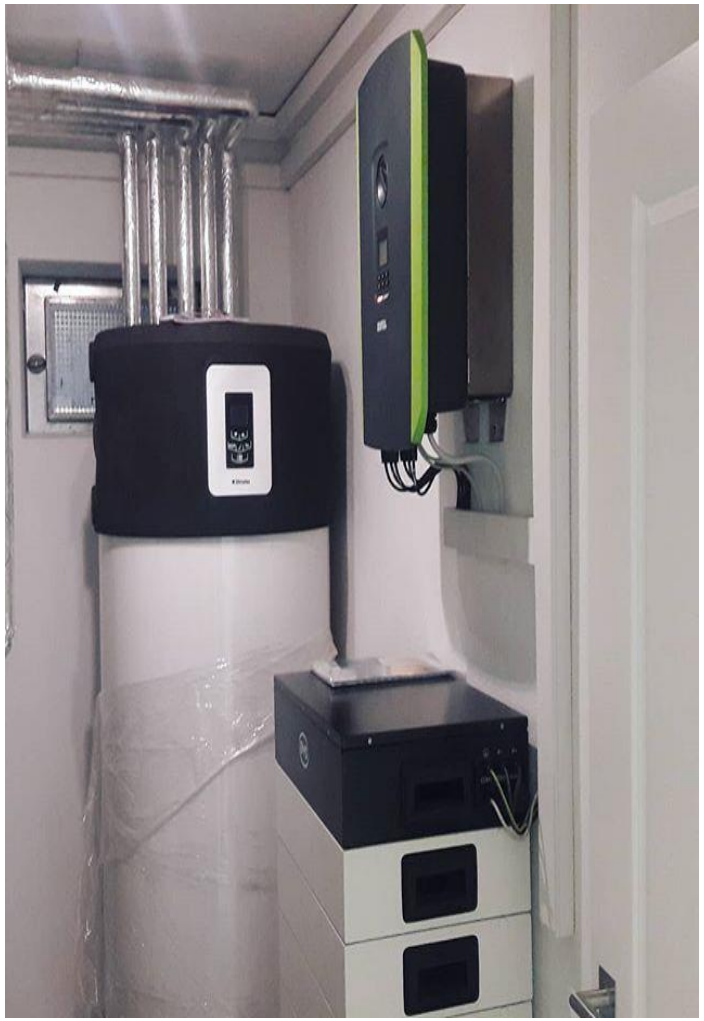
BATTERY BOX

Residencial Pequeño On-Grid



BATTERY BOX

Residencial Pequeño On-Grid



BATTERY BOX

Residencial Pequeño On-Grid

BATTERY BOX

Residencial Flexible On-Grid

BATTERY BOX

Residencial Flexible On-Grid

BATTERY BOX

Residencial Grande On-Grid

BATTERY BOX

Comercial Flexible On-Grid

BATTERY BOX

Residencial Flexible On-Grid

BATTERY BOX

Residencial Flexible On-Grid

BATTERY BOX

Residencial Flexible On-Grid

BATTERY BOX

Comercial Grande On-Grid

Charge Point type and power output	Likely installation location	Approximate connection lead-time	Network considerations	Approximate connection cost
Slow up to 3kW	Domestic	Immediate	None	None
Fast 3.7kW	Domestic or street side	Immediate in most cases	Usually none	Usually none
Fast 7kW	Domestic or street side	4 to 8 weeks	Likely upgrade to service cable and local mains	£1,000 to £3,000
Fast 22kW	Street side or public charging location	8 to 12 weeks	Streetworks and permissions	£3,500 to £12,000
Rapid 43kW	Public charging location	8 to 12 weeks	Streetworks and permissions	£3,500 to £12,000
Super 130kW or multiple rapid chargers	Public charging location	16 weeks	Streetworks, permissions and cost of land for transformer	£70,000 to £120,000

Source: Western Power Distribution Electric vehicle strategy

BATTERY BOX

Residencial Pequeño Off-Grid

BATTERY BOX

Residencial Pequeño Off-Grid

BATTERY BOX

Residencial Pequeño Off-Grid

BATTERY BOX

Residencial Grande Off-Grid

BATTERY BOX

Residencial Mediano Off-Grid

BATTERY BOX

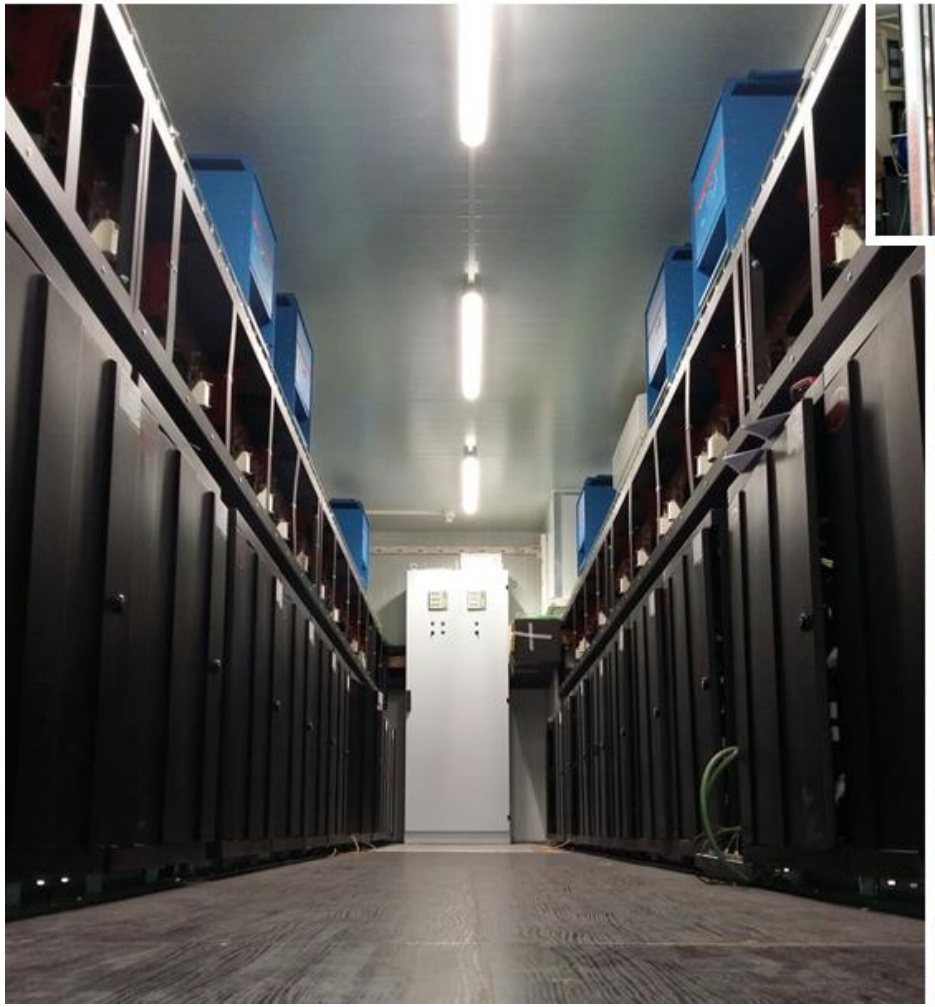
Residencial Mediano Off-Grid

BATTERY BOX

Comercial Grande On-Grid

BATTERY BOX

Comercial Grande Off-Grid



BATTERY BOX

Comercial Grande Off-Grid

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Comercial Grande Off-Grid

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Comercial Grande Off-Grid

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FÁCIL
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HVS/HVM
INSTALACIÓN

HVS / HVM

BYD BATTERY-BOX PREMIUM HVS&HVM COMPATIBLE INVERTER LIST – V1.3

Inverter		HVS 5.1	HVS 7.7	HVS 10.2	HVS 12.8	HVM 8.3	HVM 11.0	HVM 13.8	HVM 16.6	HVM 19.3	HVM 22.1
Fronius*	Symo Hybrid*	–	–	–	–	✓	✓	✓	✓	✓	✓
	Primo Gen24 Plus*	✓	✓	–	–	–	✓	✓	✓	✓	–
	Symo Gen24 Plus*	✓	✓	✓	–	–	✓	✓	✓	✓	✓
	*Planned configuration – not officially released yet. Could be subject to change										
GoodWe	ET	✓	✓	✓	✓	–	✓	✓	✓	✓	✓
	BT	✓	✓	✓	✓	–	✓	✓	✓	✓	✓
	EH	✓	✓	✓	–	✓	✓	✓	✓	✓	✓
	BH	✓	✓	✓	–	✓	✓	✓	✓	✓	✓
		HVS is a planned configuration – not officially released yet. Could be subject to change				HVM Released (CW15) Firmware: GoodWe Inverters (ARM) ≥ V11. BYD Battery-Box Premium HVM: BMU ≥ V3.7, BMS ≥ V3.16;					
KOSTAL	Plenticore Plus 3.0	✓	✓	✓	✓	–	✓	–	–	–	–
	Plenticore Plus 4.2/5.5/7.0/8.5/10.0	✓	✓	✓	✓	–	✓	✓	✓	✓	✓
	Plenticore BI 5.5-13, 5.5-26	✓	✓	✓	✓	–	–	✓	✓	✓	✓
	Plenticore BI 10.0-26	–	✓	✓	✓	–	–	✓	✓	✓	✓
	Released (CW17) Firmware: KOSTAL Inverters ≥ 01.42. BYD Battery-Box Premium HVS & HVM: BMU ≥ 3.7, BMS ≥ 3.16										
	Piko MP Plus 1.5-1, 2.0-1, 2.5-1*	✓	✓	–	–	✓	✓	–	–	–	–
	Piko MP Plus 3.0-1, 3.0-2, 3.5-1, 3.5-2, 4.6-2, 5.0-2*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	*Planned configuration – not officially released yet. Could be subject to change										

Version V1.3; Update: 2020-05-14

Inverter		HVS 5.1	HVS 7.7	HVS 10.2	HVS 12.8	HVM 8.3	HVM 11.0	HVM 13.8	HVM 16.6	HVM 19.3	HVM 22.1
SMA*	Sunny Boy Storage 2.5*	✓	✓	✓	–	–	✓	✓	✓	✓	✓
	Sunny Boy Storage 3.7*	✓	✓	✓	–	✓	✓	✓	✓	✓	✓
	Sunny Boy Storage 5.0*	–	✓	✓	–	–	✓	✓	✓	✓	✓
	Sunny Boy Storage 6.0*	–	✓	✓	–	–	✓	✓	✓	✓	✓
	*Planned configuration – not officially released yet. Could be subject to change										
Sungrow	SH5.0/6.0/8.0/10RT	✓	✓	✓	✓	–	✓	✓	✓	✓	✓
	Released (CW20) Firmware: Sungrow Inverters ARM ≥ V11_V01_A, MDSP ≥ V11_V01_A. BYD Battery-Box Premium HVS & HVM: BMU ≥ 3.7, BMS ≥ 3.16										
KACO*	blueplanet hybrid 6.0 - 10.0 TL3*	✓	✓	✓	–	✓	✓	✓	✓	✓	✓
	*Planned configuration – not officially released yet. Could be subject to change										

NOTICE

1. Maximum three battery systems could be connected in parallel. The below requirements must be fulfilled under parallel connection:
   a) HVS system CANNOT be connected in parallel with HVM system;
   b) Every system connected in parallel requires the same module quantity.
2. Installation before official release is not allowed.
3. Configurations marked in grey are not released yet and are not allowed to be installed yet. Those configurations are planned and will follow soon. The actual configuration upon official release might change.

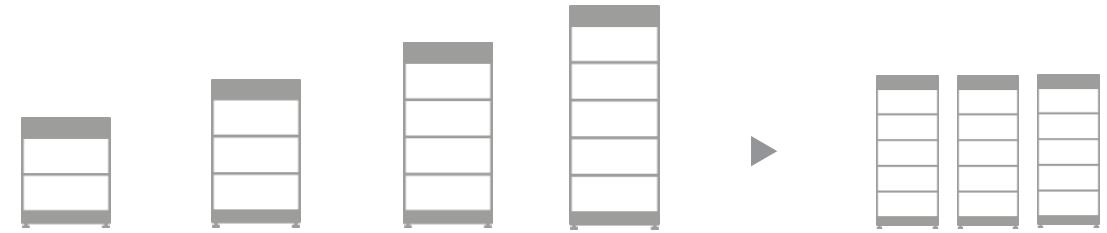
BYD Company Limited
www.bydbatterybox.com
Global Sales: batteryboxgrp@byd.com
Global Service: bboxservice@byd.com

Battery-Box EU Service Partner
EFT-Systems GmbH
www.eft-systems.de
info@eft-systems.de

Battery-Box AU Service Partner
Alps Power Pty Ltd
www.alpspower.com.au
service@alpspower.com.au

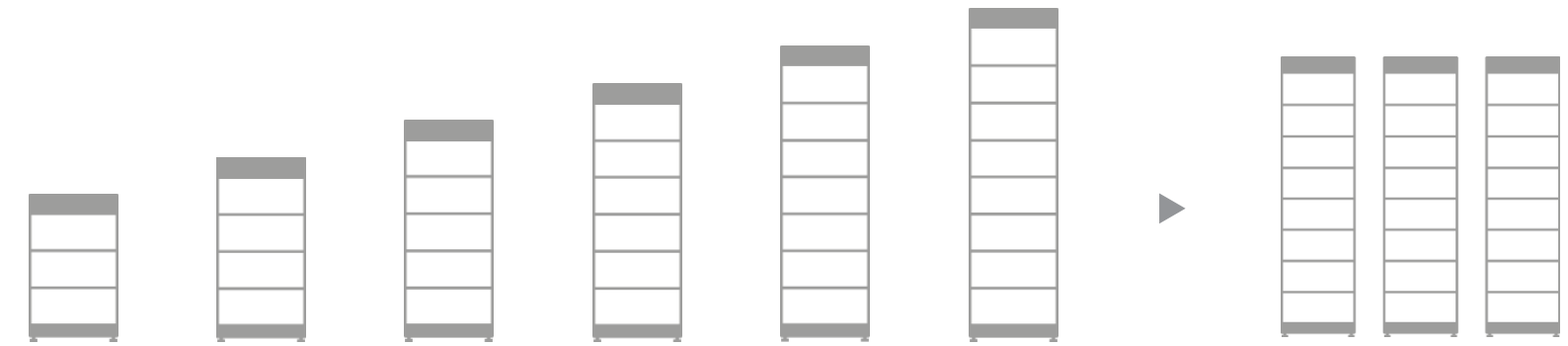
Version V1.3; Update: 2020-05-14

HVS / HVM



HVS 5.1 HVS 7.7 HVS 10.2 HVS 12.8

3 x HVS 12.8



HVM 8.3 HVM 11.0 HVM 13.8 HVM 16.6 HVM 19.3 HVM 22.1

3 x HVM 22.1

BATTERY BOX

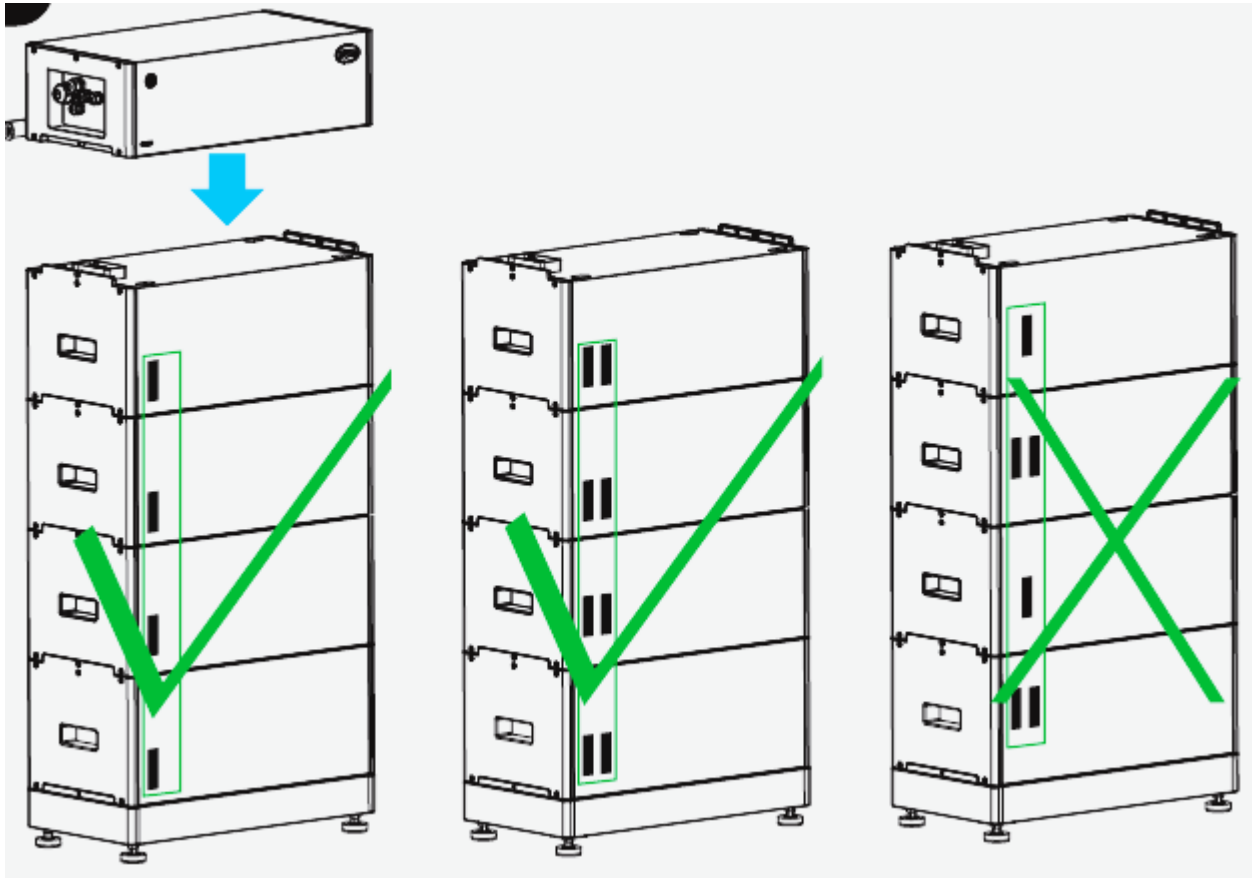
HVS/HVM

HVS 10.2

HVM 11.0

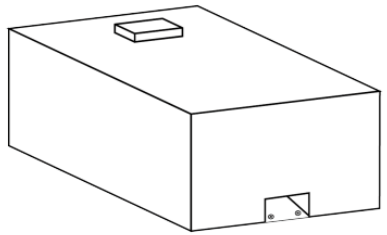
BATTERY BOX

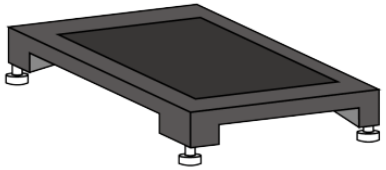
HVS/HVM

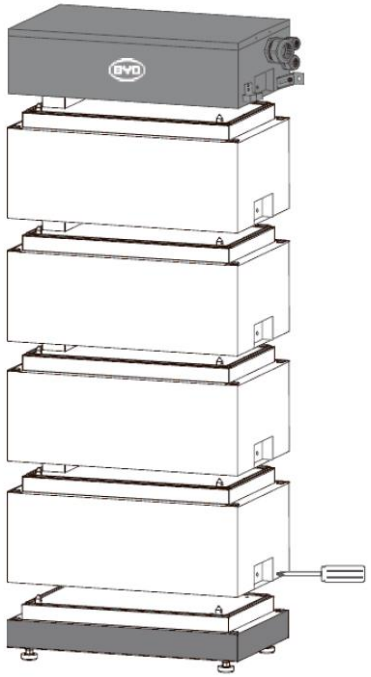


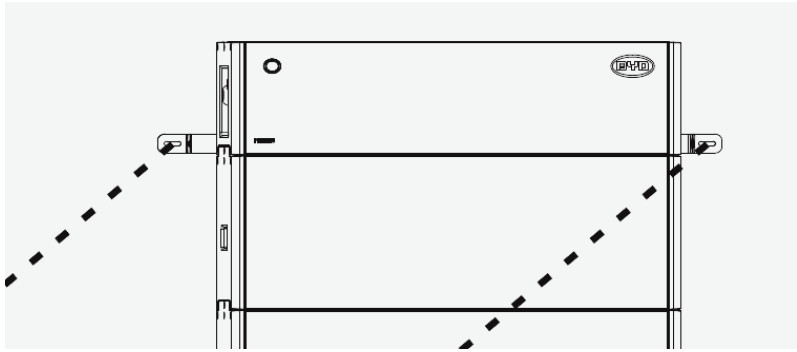
BATTERY BOX

PASO 1 - SIN CABLES INTERNOS









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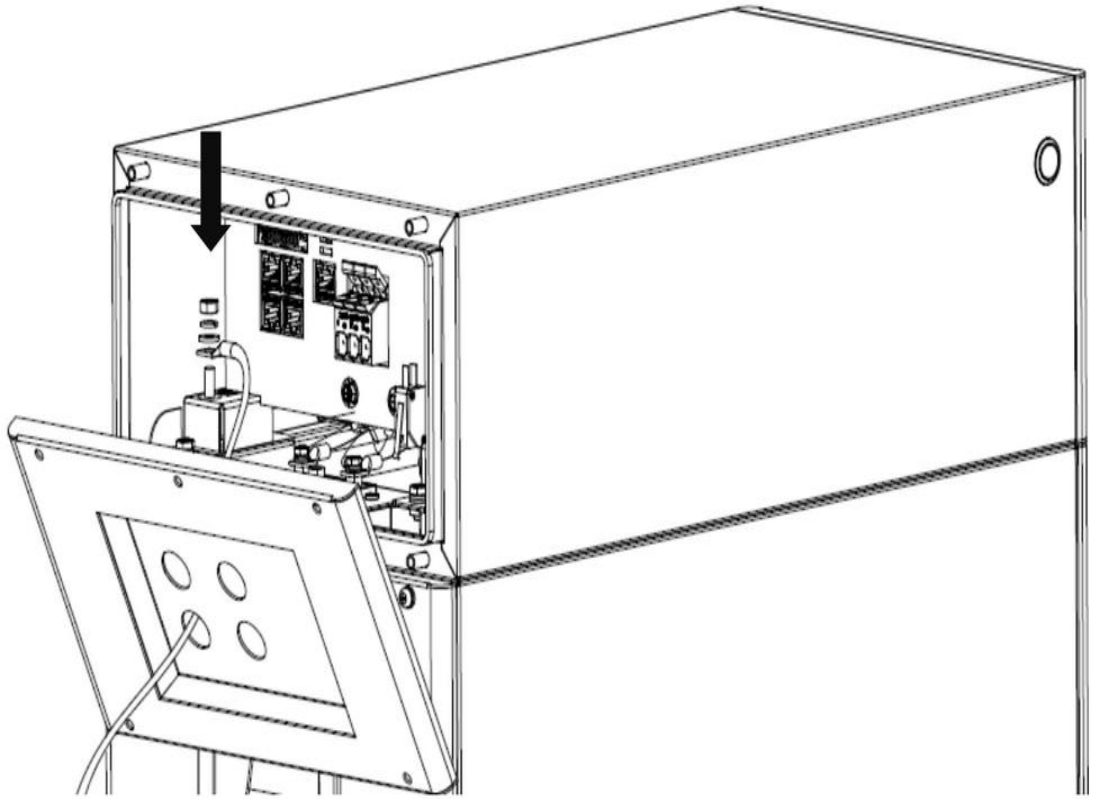
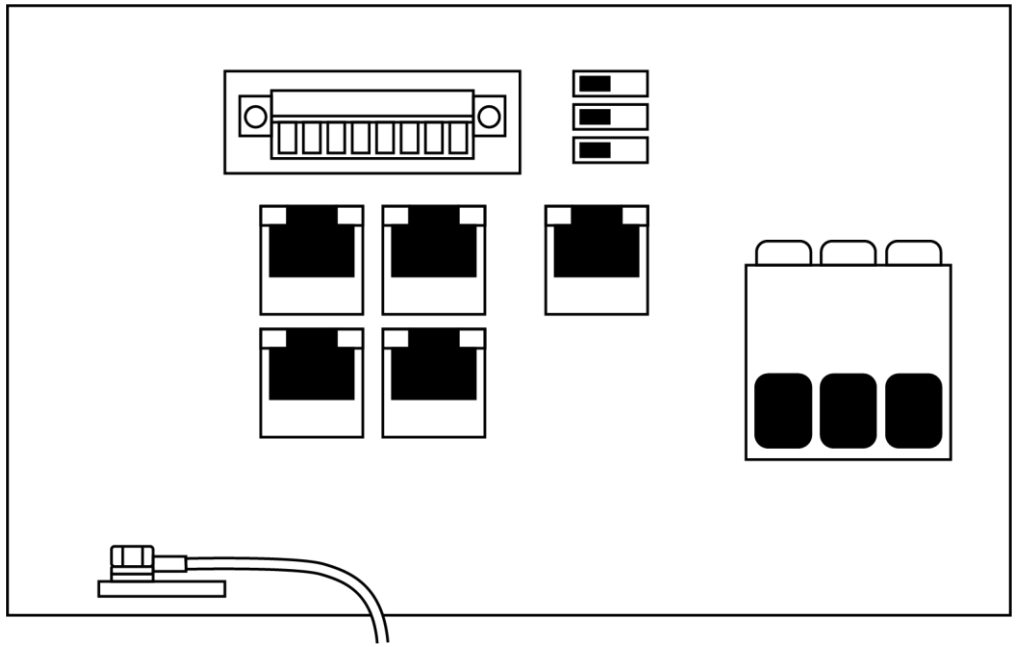
PASO 2 - CONEXIONES EXTERNAS SIMPLIFICADAS

BATTERY BOX

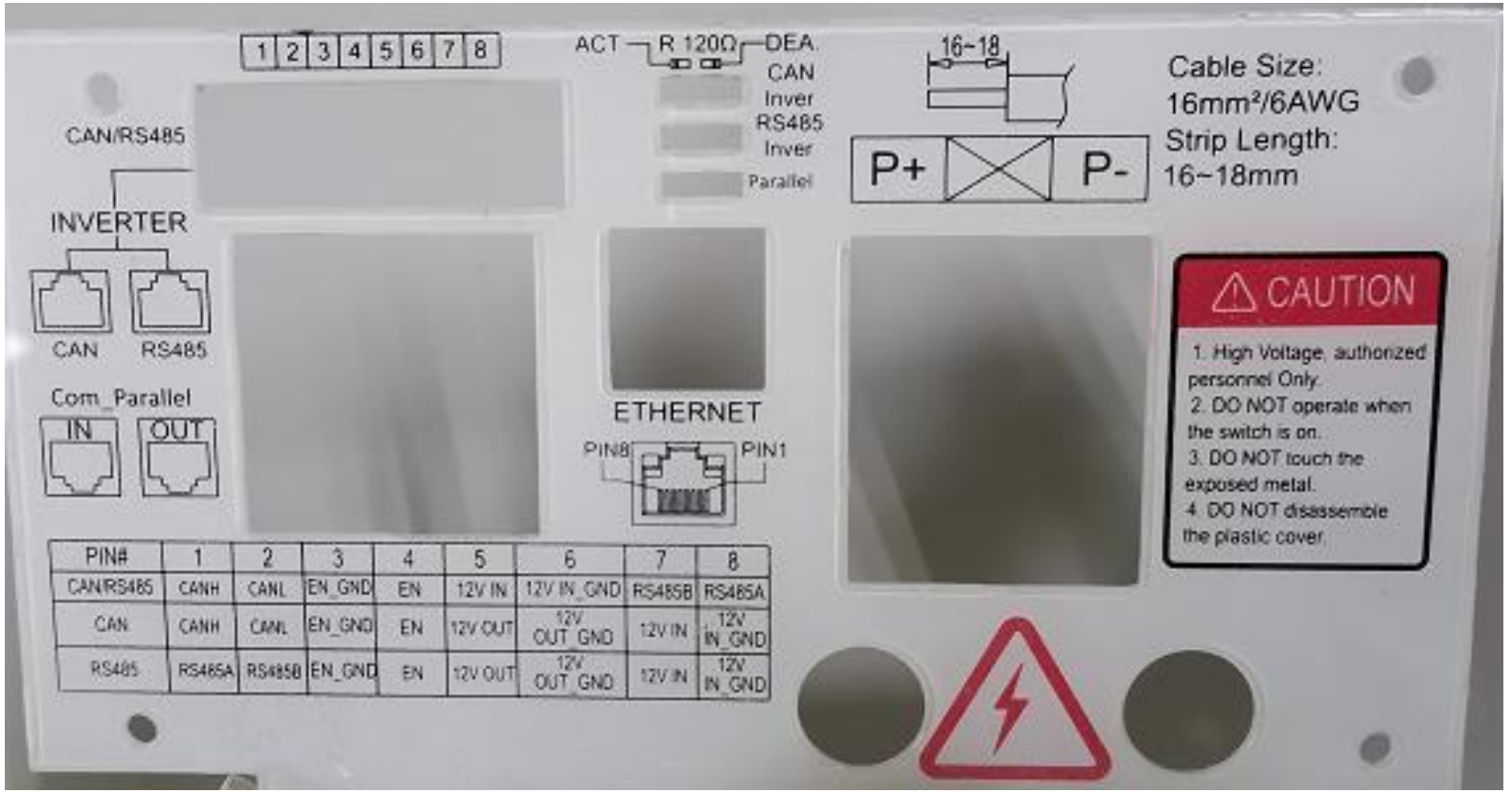
PASO 2 – VISTA GENERAL / CONEXIONES EXTERNAS SIMPLIFICADAS





BATTERY BOX

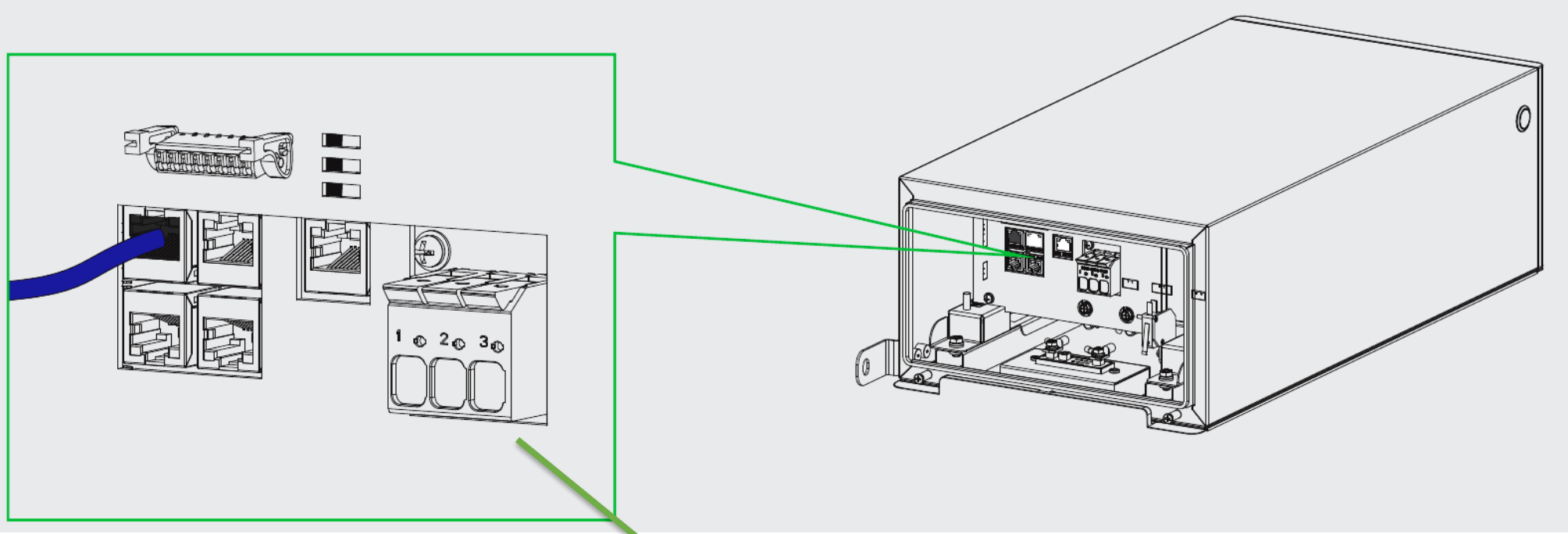
PASO 2 – VISTA GENERAL / CONEXIONES EXTERNAS SIMPLIFICADAS

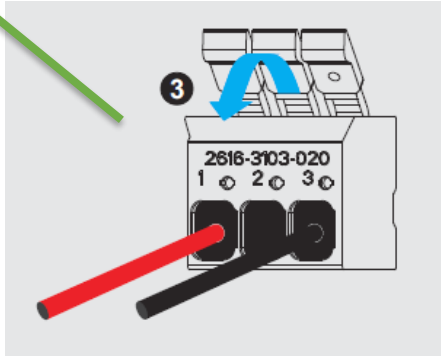


PIN#	1	2	3	4	5	6	7	8
CAN/RS485	CANH	CANL	EN_GND	EN	12V IN	12V IN_GND	RS485B	RS485A
CAN	CANH	CANL	EN_GND	EN	12V OUT	12V OUT_GND	12V IN	12V IN_GND
RS485	RS485A	RS485B	EN_GND	EN	12V OUT	12V OUT_GND	12V IN	12V IN_GND

BATTERY BOX

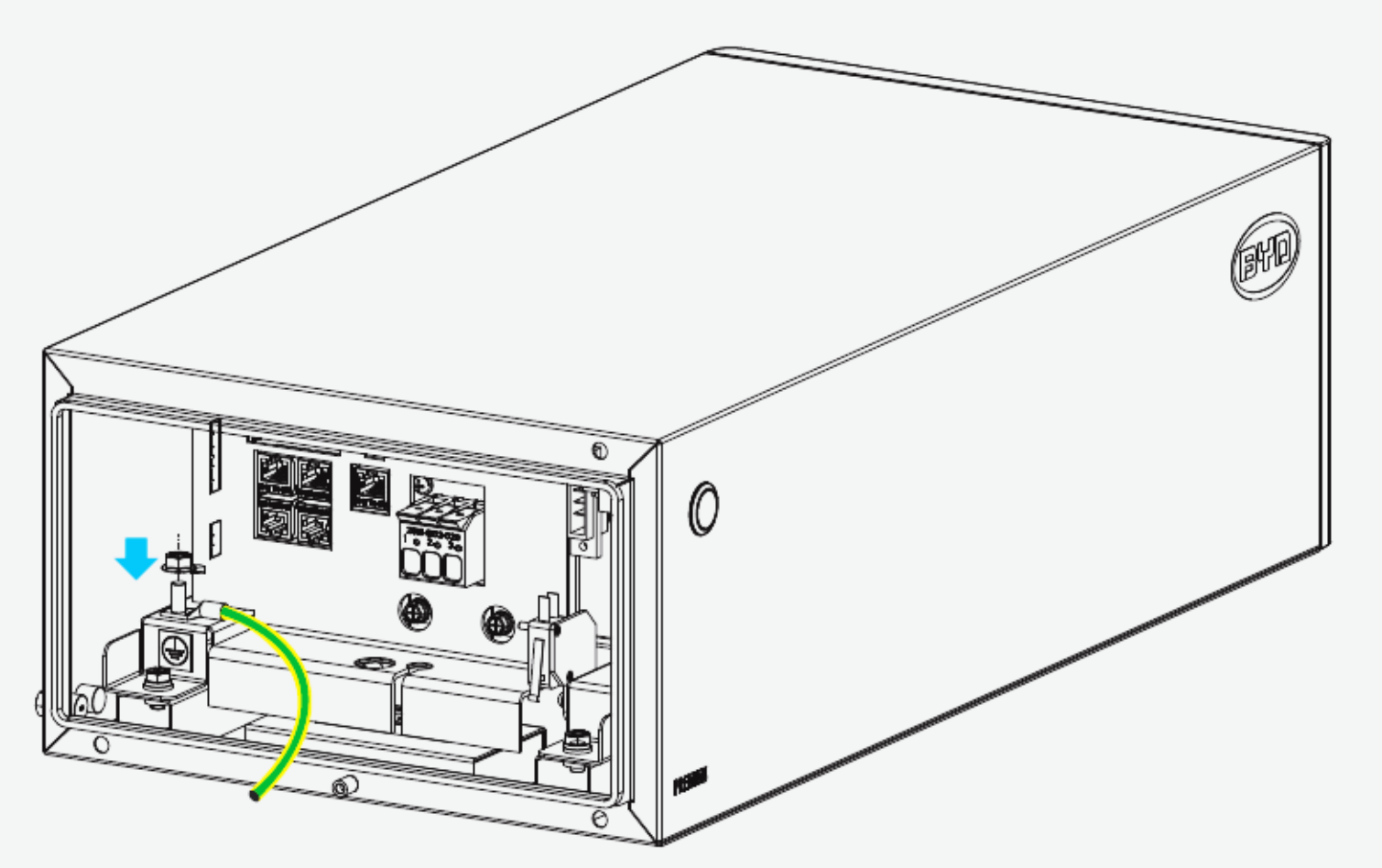
PASO 2 – CABLE DE POTENCIA / CONEXIONES EXTERNAS SIMPLIFICADAS



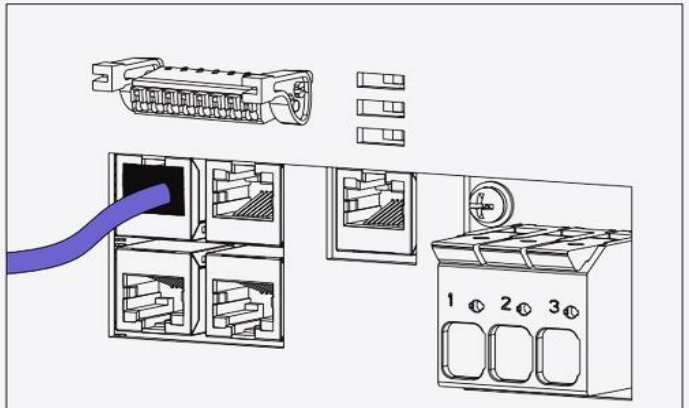


BATTERY BOX

PASO 2 – CABLE DE TIERRA / CONEXIONES EXTERNAS SIMPLIFICADAS



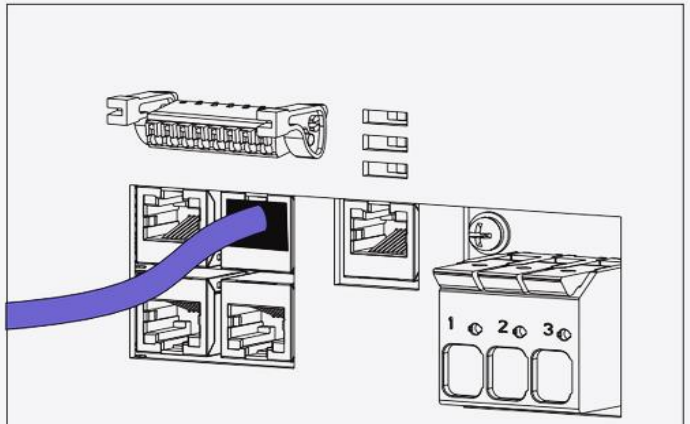
PASO 2 – CABLE COMUNICACIÓN / CONEXIONES EXTERNAS SIMPLIFICADAS



Option a

GOODWE

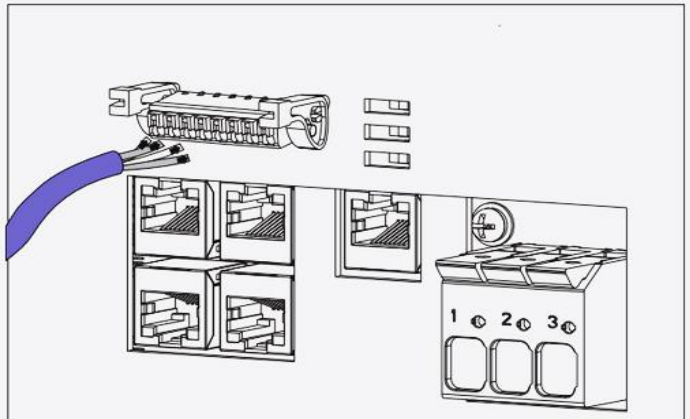
SMA



Option b

Fronius

KOSTAL



Option c

GOODWE

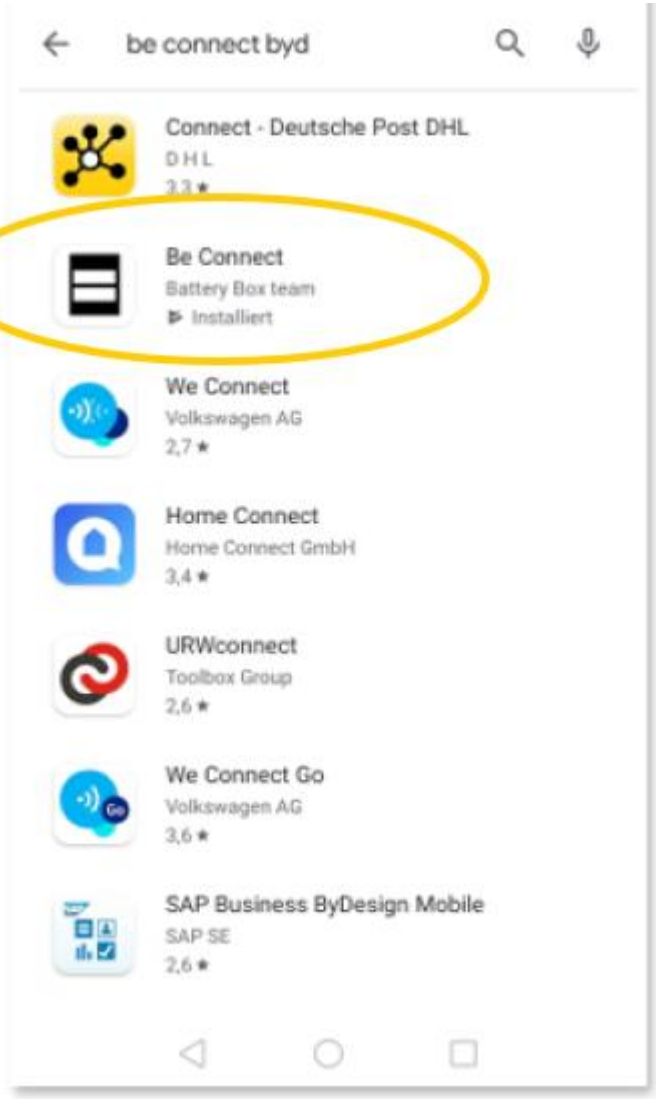
SMA

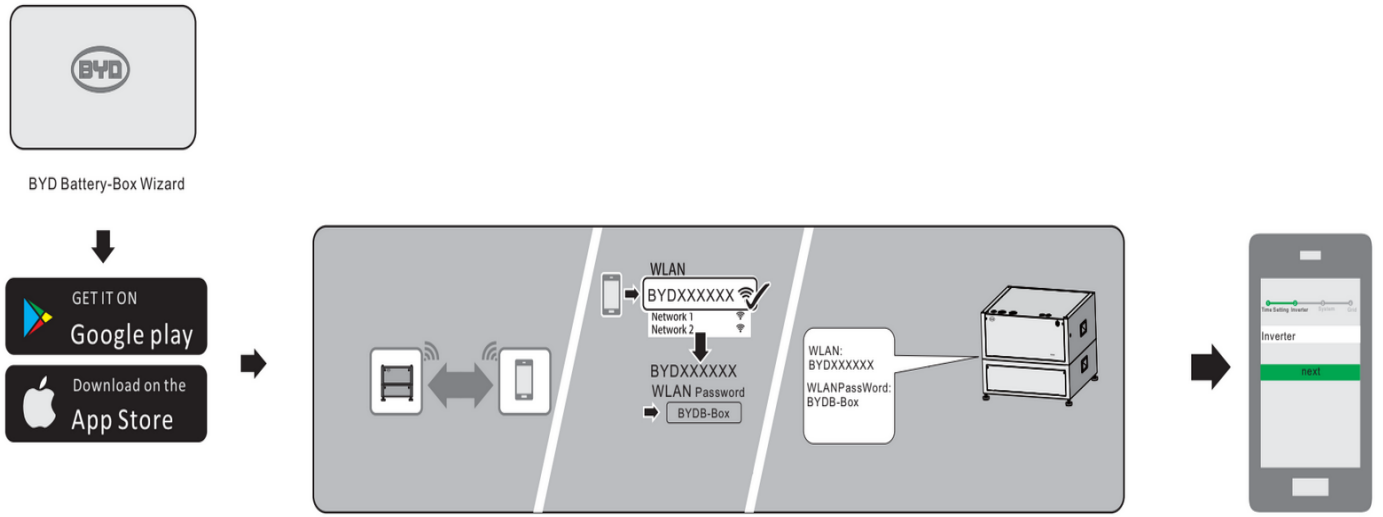
KOSTAL

Fronius

BATTERY BOX

PASO 3 - CONFIGURACIÓN UNIFICADA PARA TODOS LOS MODELOS



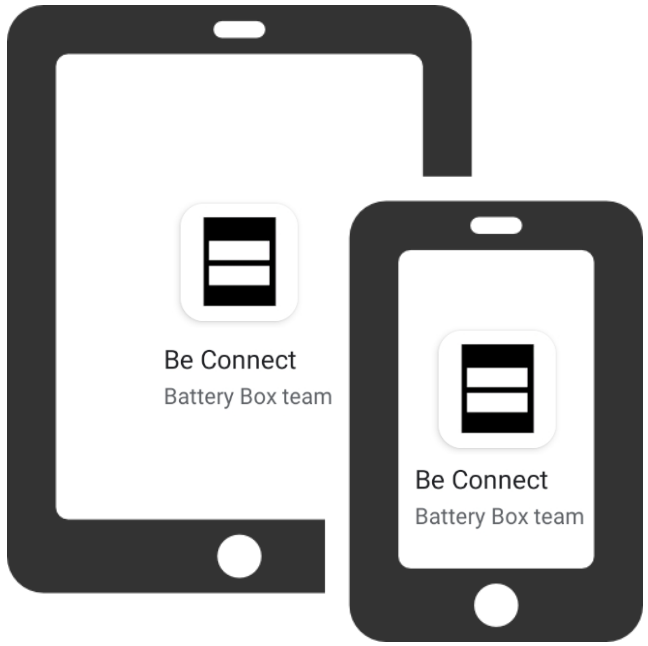


La **configuración** de toda la gama Premium se realiza a través de la misma app (PlayStore & iOS) y es estrictamente necesario antes de realizar una nueva configuración:

- Comprobar que la app está actualizada
- Seguir proceso de actualización de Firmwares durante la configuración
- Encender y configurar primero la batería y posteriormente el inversor

BATTERY BOX

APP – BYD BE CONNECT

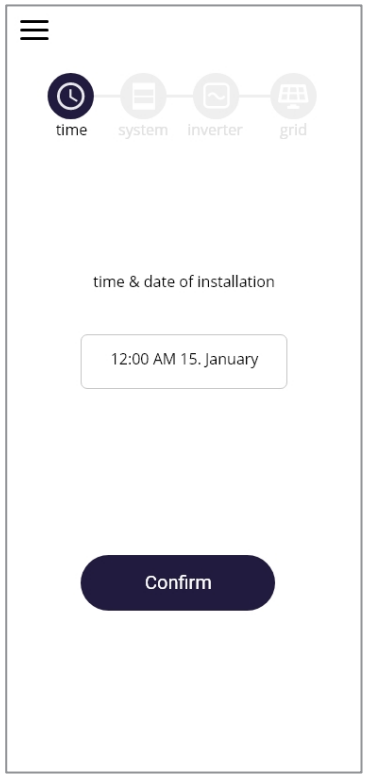


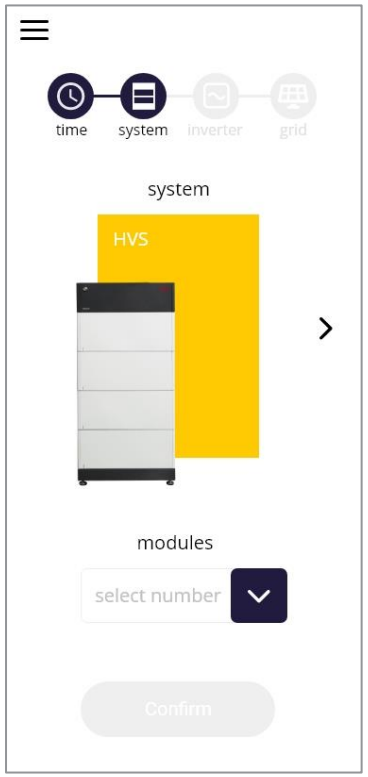
Android:

Apple:

BATTERY BOX

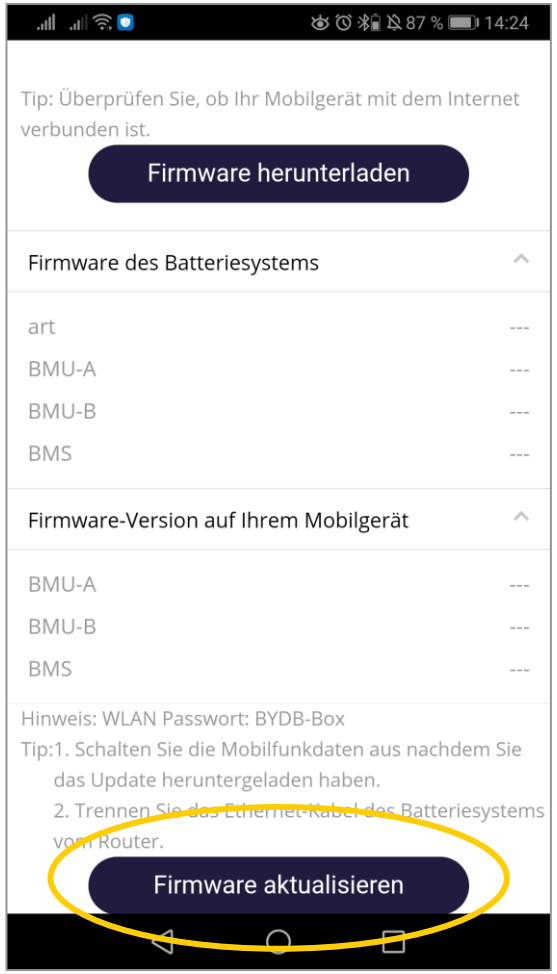
CONFIGURACIÓN VIA APP





BATTERY
BOX

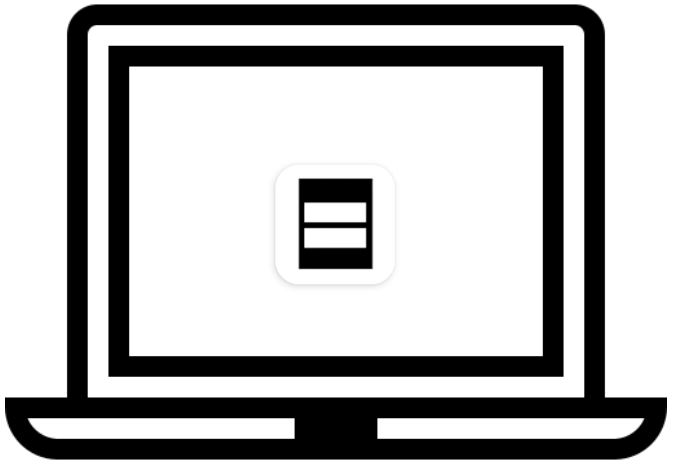
ACTUALIZAR SIEMPRE EL FIRMWARE CON LA APP



Última versión: BMU **≥V3.13** // BMS **≥V3.19**

BATTERY BOX

POSIBILIDAD DE CONFIGURACIÓN CON APP PARA EL PC



BATTERY BOX

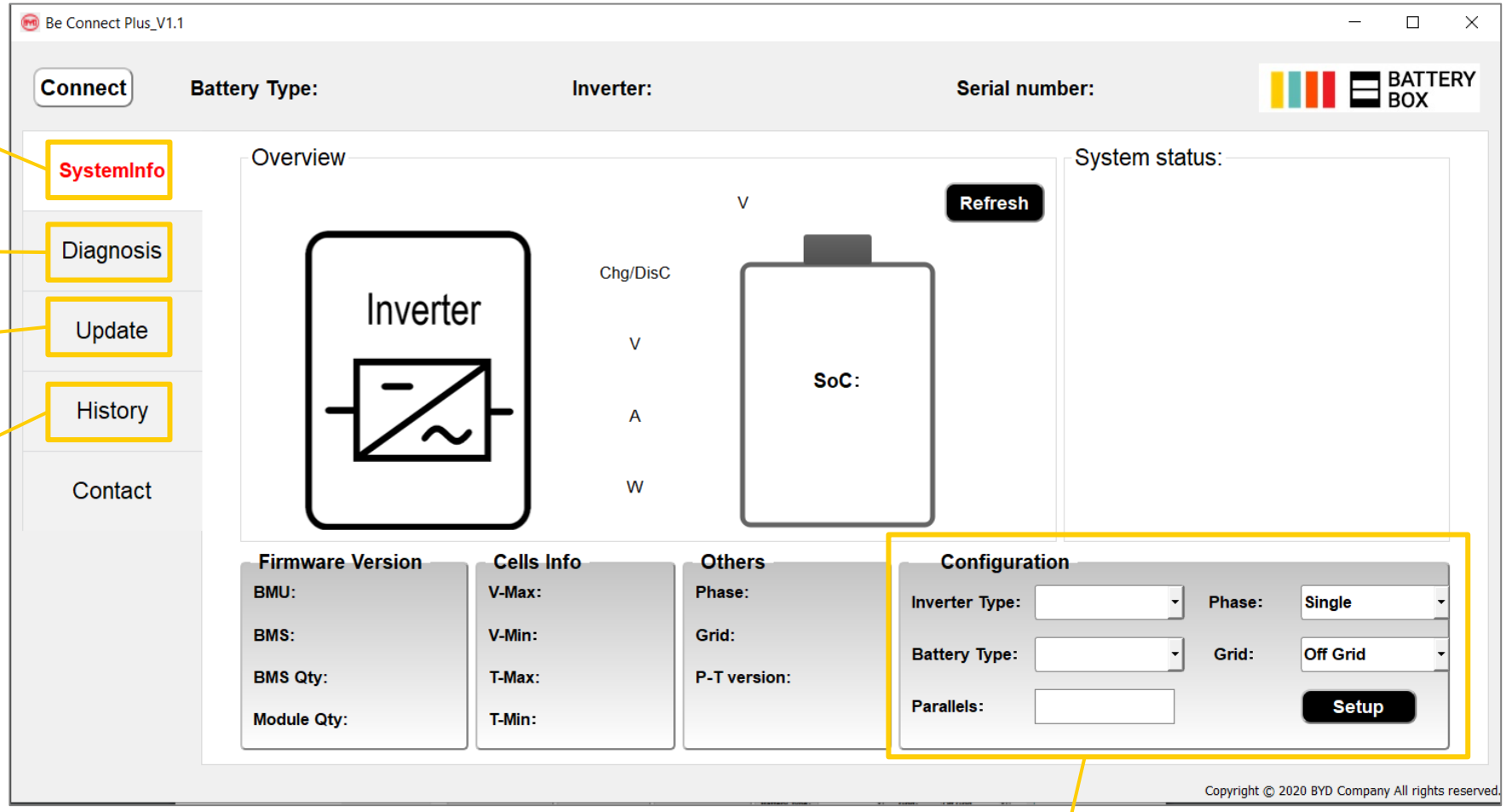
BE CONNECT PLUS

System Info & **Konfiguration**

Diagnose

Update

Gespeicherte Meldungen



Konfiguration

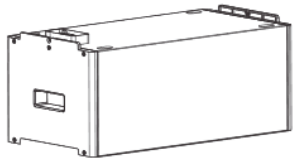
BATTERY BOX

CONEXIÓN A INTERNET

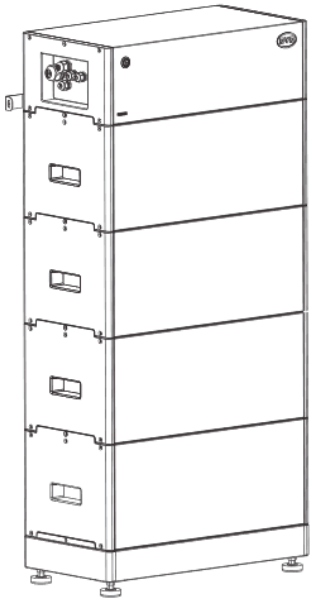
BATTERY BOX

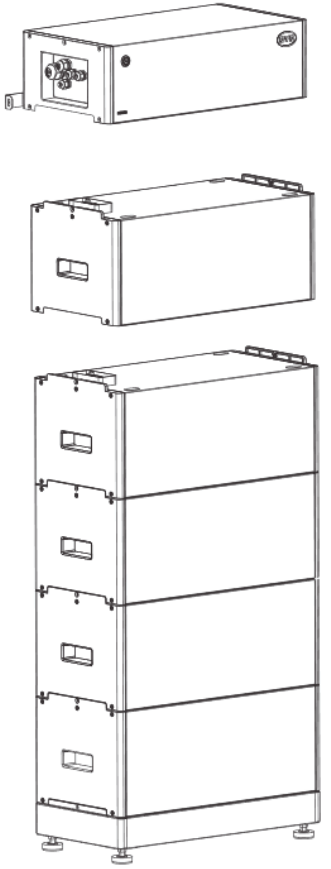
EXPANSIÓN DE MÓDULOS EN UNA MISMA TORRE

Baterías del distribuidor
SOC = 25%



Batería funcionando
SOC = 25%

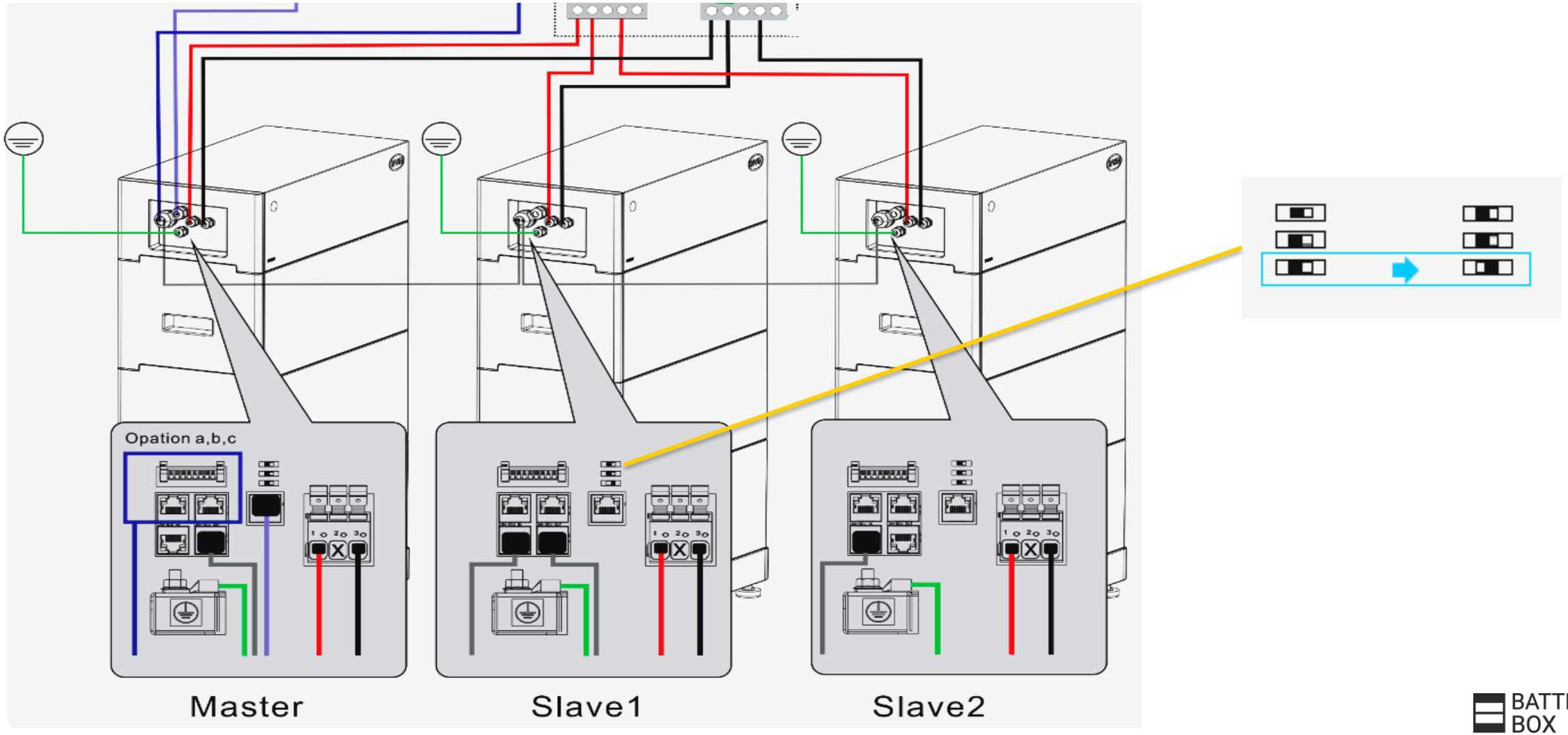




+ VOLVER A CONFIGURAR CON LA APP

BATTERY BOX

CONEXIÓN EN PARALELO



BATTERY BOX

DOCUMENTOS HVS/HVM

1. Lista de configuración mínima HVM/HVS + Manuales LVL + BCP + Datasheet:
https://www.bydbatterybox.com/downloads

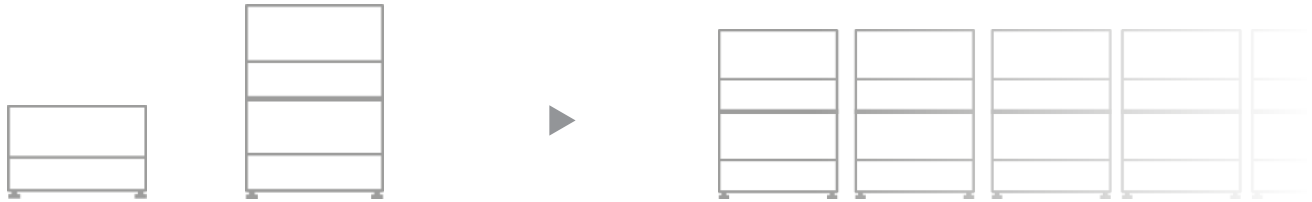
2. Vídeos de instalación HVM/HVS:
https://www.youtube.com/channel/UCz6J7UePgFM2HnwNv9nsHpQ/videos

BATTERY BOX

LVL
INSTALACIÓN

BATTERY BOX

LVL



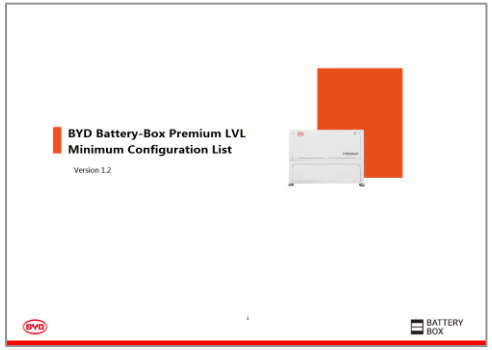
LVL 15.4

2 x LVL 15.4

64 x LVL 15.4

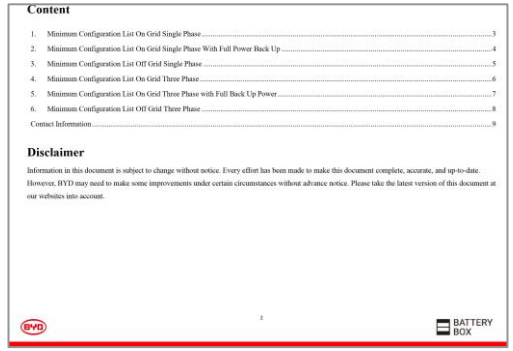
BATTERY BOX

LVL - LISTA DE COMPATIBLIDAD



BYD Battery-Box Premium LVL
Minimum Configuration List

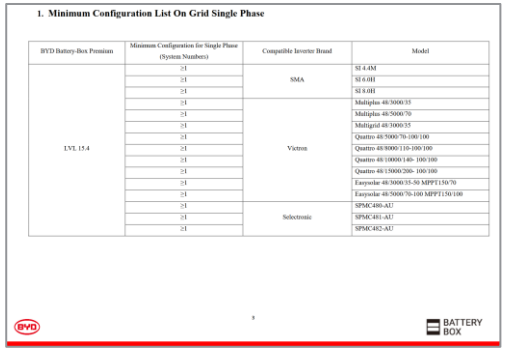
Version 1.2



Content

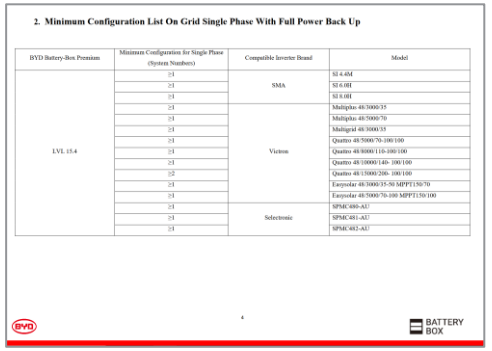
Disclaimer

Information in this document is subject to change without notice. Every effort has been made to make this document complete, accurate, and up-to-date. However, BYD may need to make some improvements under certain circumstances without advance notice. Please take the latest version of this document at our websites into account.



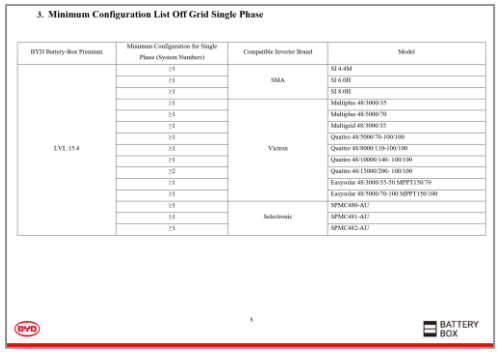
1. Minimum Configuration List On Grid Single Phase

BYD Battery-Box Premium	Minimum Configuration for Single Phase (System Numbers)	Compatible Inverter Brand	Model
LVL 15.4	≥1	SMA	SI 4.4M
	≥1		SI 6.0H
	≥1		SI 8.0H
	≥1	Victron	Multiplus 48/3000/35
	≥1		Multiplus 48/5000/70
	≥1		Multigrid 48/3000/35
	≥1		Quattro 48/5000/70-100/100
	≥1		Quattro 48/8000/110-100/100
	≥1		Quattro 48/10000/140- 100/100
	≥1		Quattro 48/15000/200- 100/100
	≥1		Easysolar 48/3000/35-50 MPPT150/70
	≥1		Easysolar 48/5000/70-100 MPPT150/100
	≥1	Selectronic	SPMC480-AU
	≥1		SPMC481-AU
	≥1		SPMC482-AU



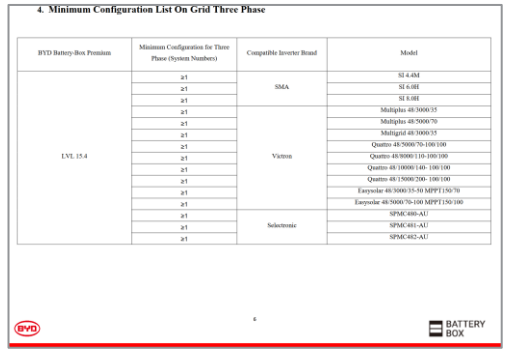
2. Minimum Configuration List On Grid Single Phase With Full Power Back Up

BYD Battery-Box Premium	Minimum Configuration for Single Phase (System Numbers)	Compatible Inverter Brand	Model
LVL 15.4	≥1	SMA	SI 4.4M
	≥1		SI 6.0H
	≥1		SI 8.0H
	≥1	Victron	Multiplus 48/3000/35
	≥1		Multiplus 48/5000/70
	≥1		Multigrid 48/3000/35
	≥1		Quattro 48/5000/70-100/100
	≥1		Quattro 48/8000/110-100/100
	≥1		Quattro 48/10000/140- 100/100
	≥2		Quattro 48/15000/200- 100/100
	≥1		Easysolar 48/3000/35-50 MPPT150/70
	≥1		Easysolar 48/5000/70-100 MPPT150/100
	≥1	Selectronic	SPMC480-AU
	≥1		SPMC481-AU
	≥1		SPMC482-AU



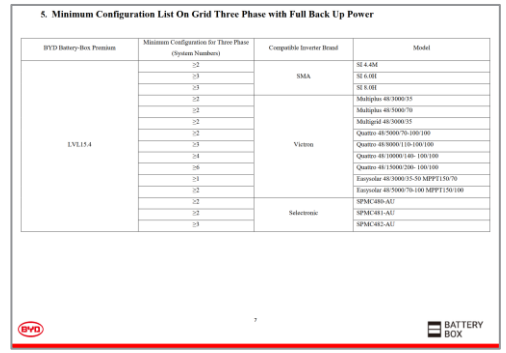
3. Minimum Configuration List Off Grid Single Phase

BYD Battery-Box Premium	Minimum Configuration for Single Phase (System Numbers)	Compatible Inverter Brand	Model
LVL 15.4	≥1	SMA	SI 4.4M
	≥1		SI 6.0H
	≥1		SI 8.0H
	≥1	Victron	Multiplus 48/3000/35
	≥1		Multiplus 48/5000/70
	≥1		Multigrid 48/3000/35
	≥1		Quattro 48/5000/70-100/100
	≥1		Quattro 48/8000/110-100/100
	≥1		Quattro 48/10000/140- 100/100
	≥2		Quattro 48/15000/200- 100/100
	≥1		Easysolar 48/3000/35-50 MPPT150/70
	≥1		Easysolar 48/5000/70-100 MPPT150/100
	≥1	Selectronic	SPMC480-AU
	≥1		SPMC481-AU
	≥1		SPMC482-AU



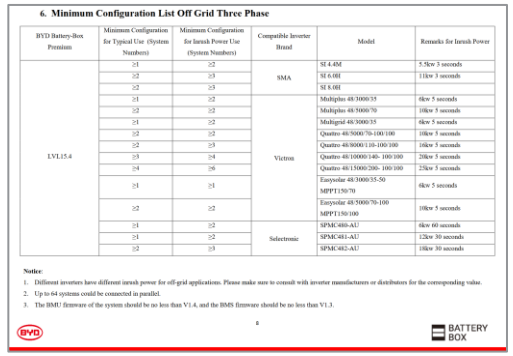
4. Minimum Configuration List On Grid Three Phase

BYD Battery-Box Premium	Minimum Configuration for Three Phase (System Numbers)	Compatible Inverter Brand	Model
LVL 15.4	≥1	SMA	SI 4.4M
	≥1		SI 6.0H
	≥1		SI 8.0H
	≥1	Victron	Multiplus 48/3000/35
	≥1		Multiplus 48/5000/70
	≥1		Multigrid 48/3000/35
	≥1		Quattro 48/5000/70-100/100
	≥1		Quattro 48/8000/110-100/100
	≥1		Quattro 48/10000/140- 100/100
	≥1		Quattro 48/15000/200- 100/100
	≥1		Easysolar 48/3000/35-50 MPPT150/70
	≥1		Easysolar 48/5000/70-100 MPPT150/100
	≥1	Selectronic	SPMC480-AU
	≥1		SPMC481-AU
	≥1		SPMC482-AU



5. Minimum Configuration List On Grid Three Phase with Full Back Up Power

BYD Battery-Box Premium	Minimum Configuration for Three Phase (System Numbers)	Compatible Inverter Brand	Model
LVL15.4	≥2	SMA	SI 4.4M
	≥3		SI 6.0H
	≥3		SI 8.0H
	≥2	Victron	Multiplus 48/3000/35
	≥2		Multiplus 48/5000/70
	≥2		Multigrid 48/3000/35
	≥2		Quattro 48/5000/70-100/100
	≥3		Quattro 48/8000/110-100/100
	≥4		Quattro 48/10000/140- 100/100
	≥6		Quattro 48/15000/200- 100/100
	≥3		Easysolar 48/3000/35-50 MPPT150/70
	≥2		Easysolar 48/5000/70-100 MPPT150/100
	≥2	Selectronic	SPMC480-AU
	≥2		SPMC481-AU
	≥3		SPMC482-AU



6. Minimum Configuration List Off Grid Three Phase

BYD Battery-Box Premium	Minimum Configuration for Typical Use (System Numbers)	Minimum Configuration for Inrush Power Use (System Numbers)	Compatible Inverter Brand	Model	Remarks for Inrush Power
LVL15.4	≥1	≥2	SMA	SI 4.4M	5.5kw 3 seconds
	≥2	≥3		SI 6.0H	11kw 3 seconds
	≥2	≥3		SI 8.0H	
	≥1	≥2	Victron	Multiplus 48/3000/35	6kw 5 seconds
	≥2	≥2		Multiplus 48/5000/70	10kw 5 seconds
	≥1	≥2		Multigrid 48/3000/35	6kw 5 seconds
	≥2	≥2		Quattro 48/5000/70-100/100	10kw 5 seconds
	≥2	≥3		Quattro 48/8000/110-100/100	16kw 5 seconds
	≥3	≥4		Quattro 48/10000/140- 100/100	20kw 5 seconds
	≥4	≥6		Quattro 48/15000/200- 100/100	25kw 5 seconds
	≥1	≥1		Easysolar 48/3000/35-50 MPPT150/70	6kw 5 seconds
	≥2	≥2		Easysolar 48/5000/70-100 MPPT150/100	10kw 5 seconds
	≥1	≥2	Selectronic	SPMC480-AU	6kw 60 seconds
	≥1	≥2		SPMC481-AU	12kw 30 seconds
	≥2	≥3		SPMC482-AU	18kw 30 seconds

Notice:

1. Different inverters have different inrush power for off-grid applications. Please make sure to consult with inverter manufacturers or distributors for the corresponding value.
2. Up to 64 systems could be connected in parallel.
3. The BMU firmware of the system should be no less than V1.4, and the BMS firmware should be no less than V1.3.

BATTERY BOX

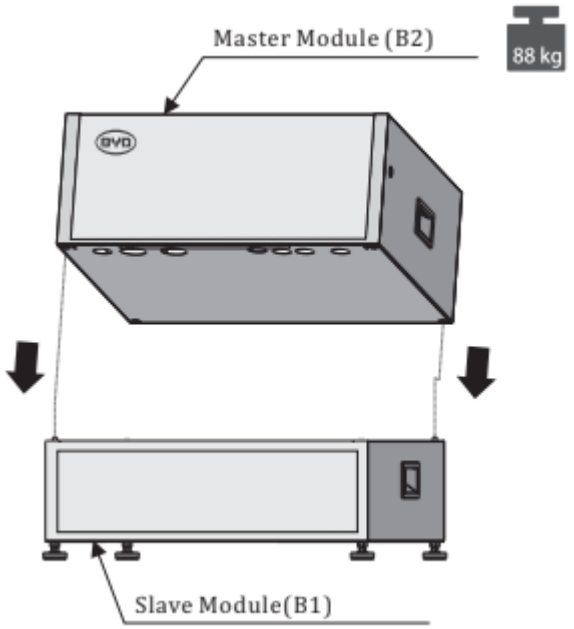
LVL – SISTEMA SINGULAR

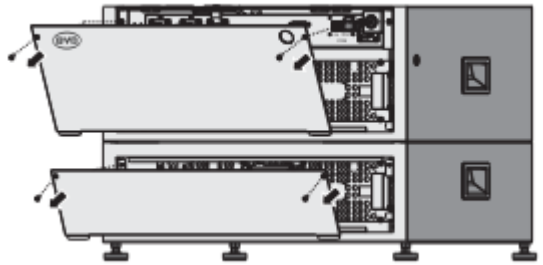
LVL

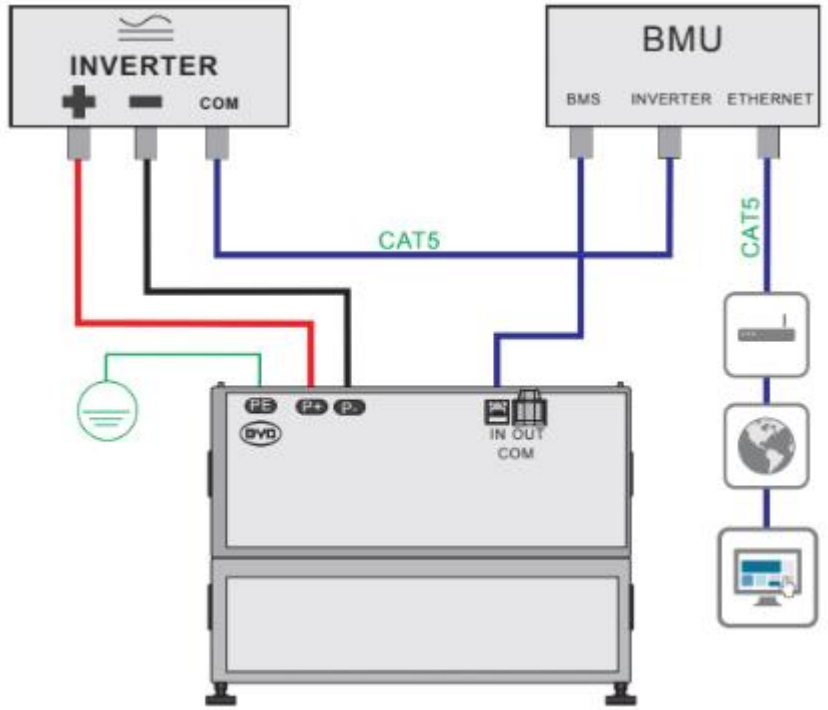
BMU - LVL/LVS

BATTERY BOX

VISTA GENERAL / MONTAJE

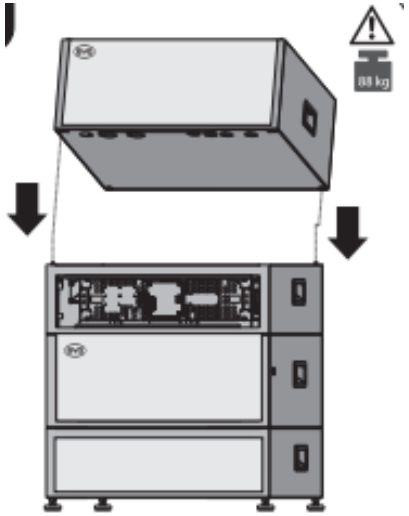


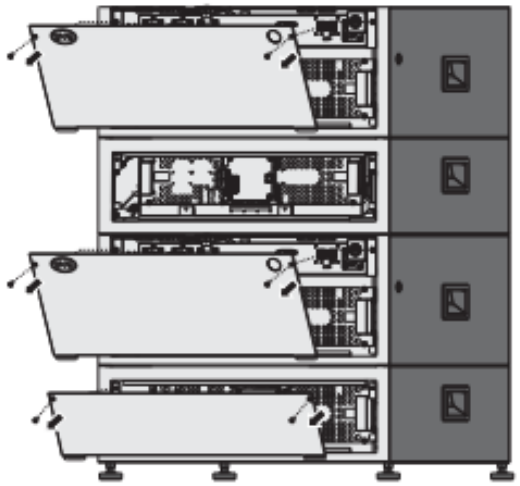


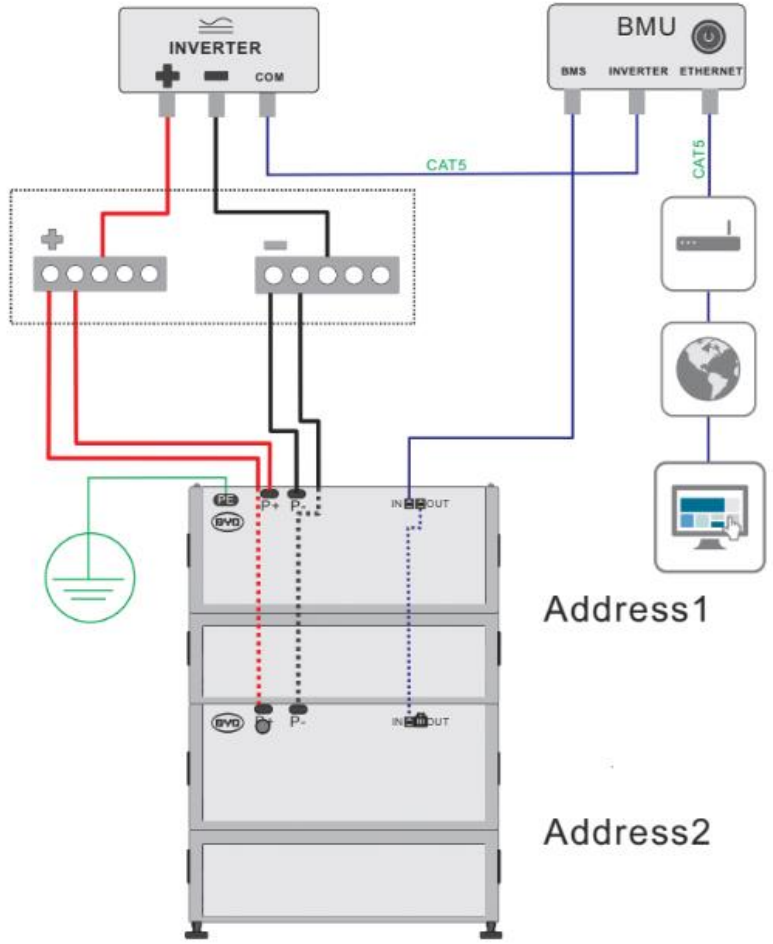


BATTERY BOX

VISTA GENERAL / MONTAJE DE DOS SISTEMAS

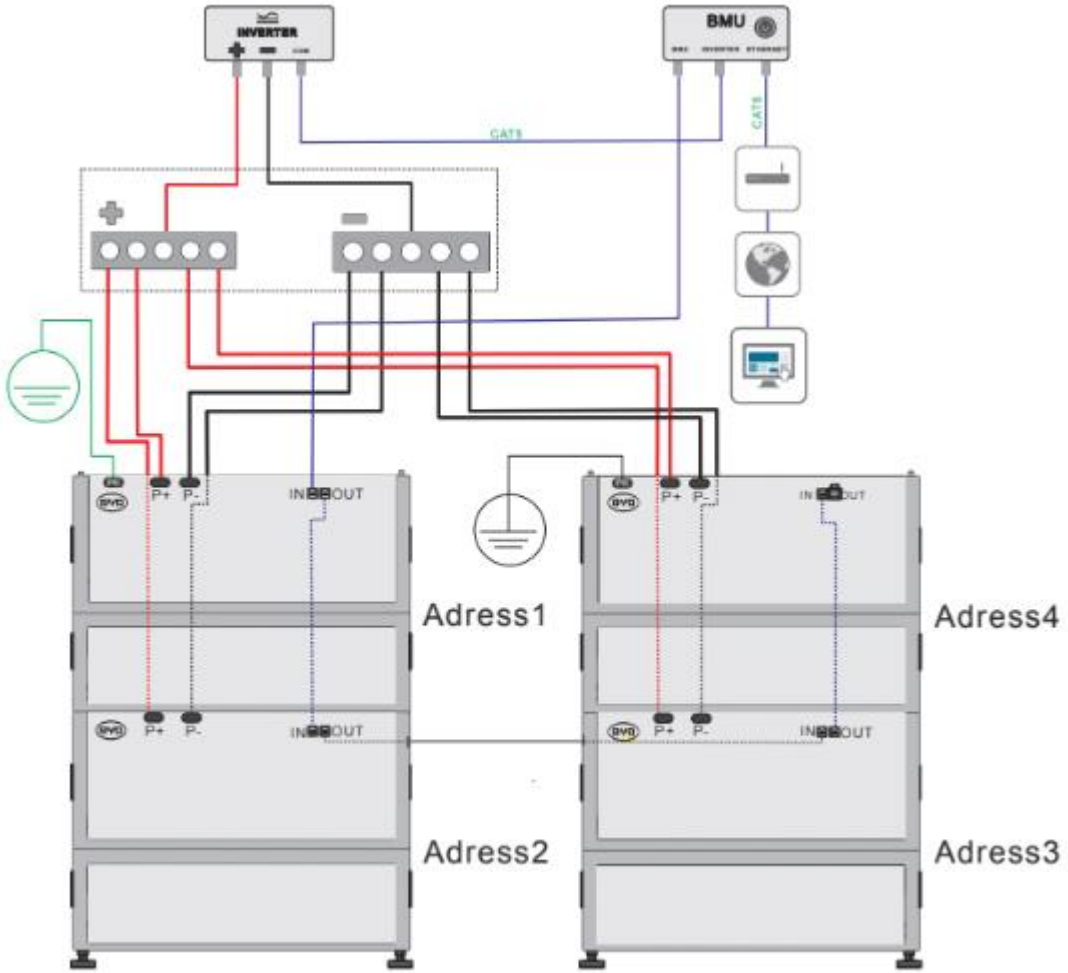






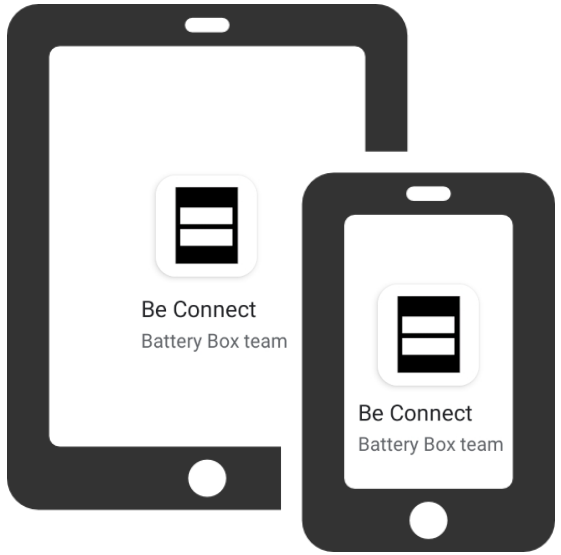
BATTERY BOX

VISTA GENERAL / MONTAJE VARIOS SISTEMAS



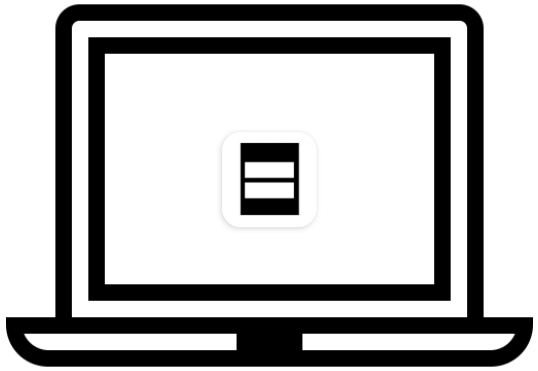
BATTERY BOX

LVL – INSTALLATION CONFIGURATION



App: „Be Connect“

/



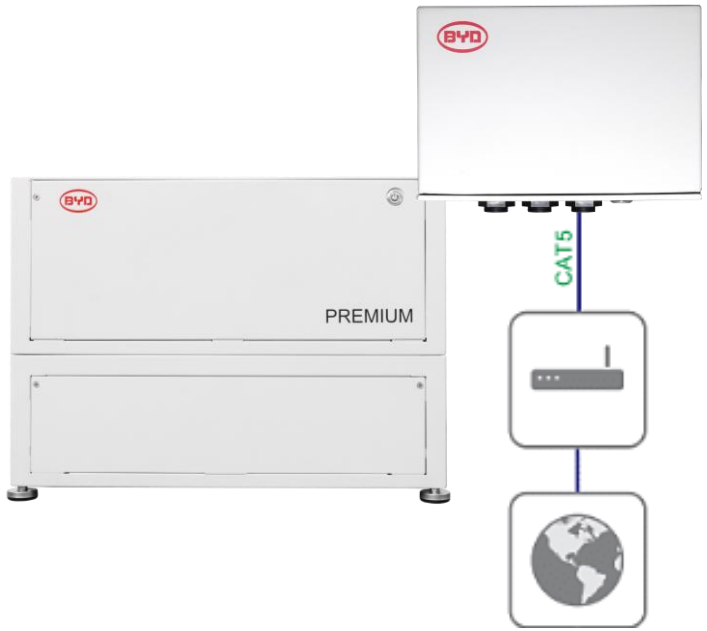
PC-Tool: „Be Connect Plus (BCP)“

La **configuración** de toda la gama Premium se realiza a través de la misma app (PlayStore & iOS) y es estrictamente necesario antes de realizar una nueva configuración:

- Comprobar que la app está actualizada
- Seguir proceso de actualización de Firmwares durante la configuración
- Encender y configurar primero la batería y posteriormente el inversor

BATTERY BOX

CONEXIÓN A INTERNET



DOCUMENTOS LVL

1. Lista de configuración mínima LVL + Manuales LVL + BCP + Datasheet:
https://www.bydbatterybox.com/downloads

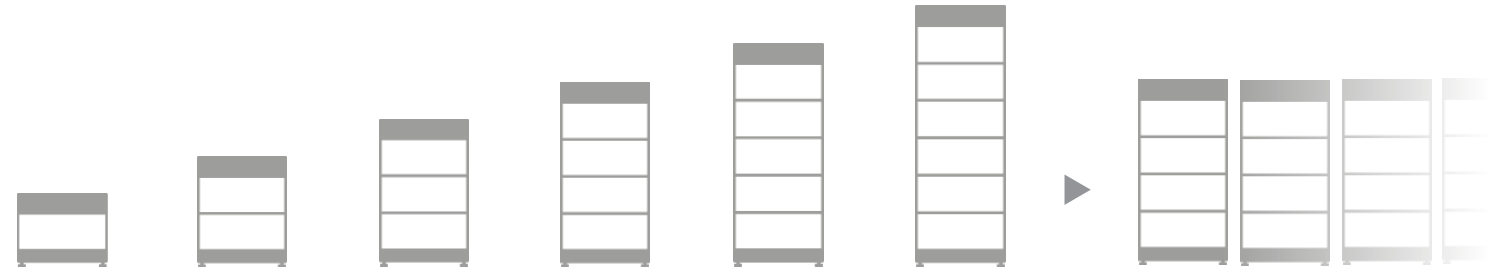
2. Vídeos de instalación LVL:
https://www.youtube.com/channel/UCz6J7UePgFM2HnwNv9nsHpQ/videos

BATTERY BOX

LVS
INSTALACIÓN

BATTERY BOX

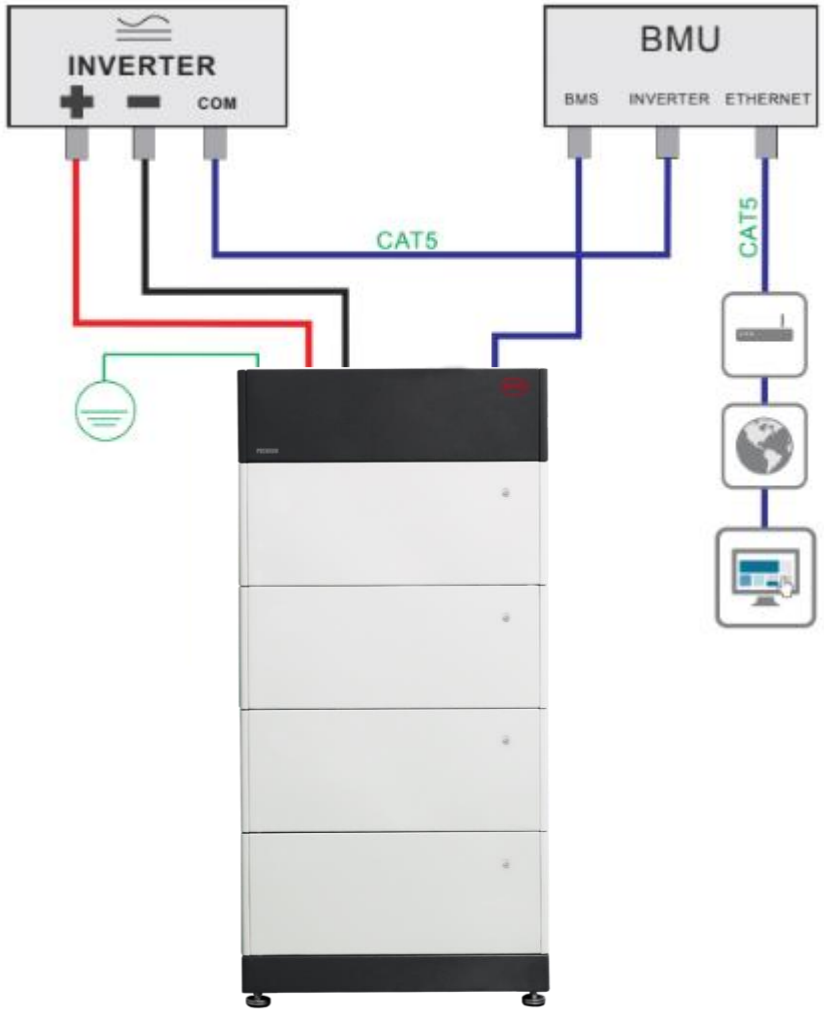
LVS



LVS 3.8 LVS 7.7 LVS 11.5 LVS 15.4 LVS 19.2 LVS 23.0 16 x LVS 15.4

BATTERY BOX

LVS - INSTALLATION



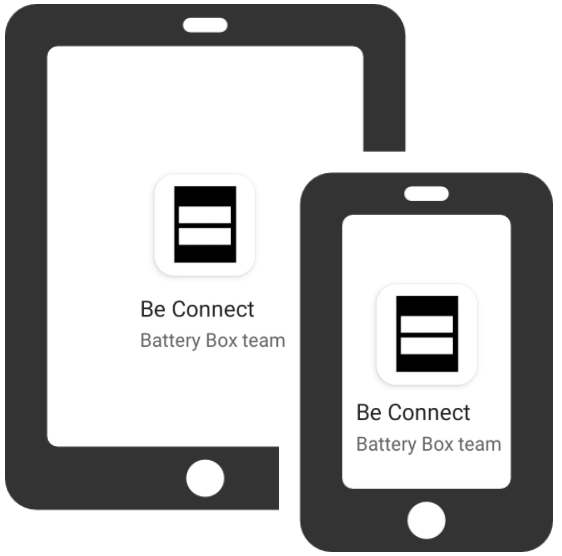
BATTERY BOX

LVS - INSTALLATION

BATTERY BOX

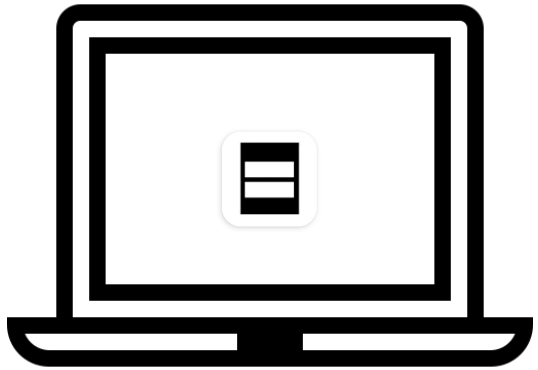

P+
COM
P−

LVS - INSTALLATION



App: „Be Connect“

/



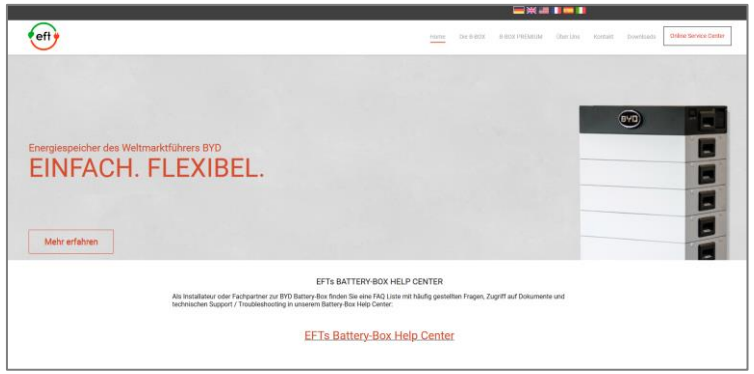
PC-Tool: „Be Connect Plus (BCP)“

BATTERY BOX

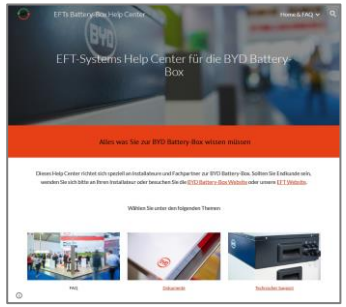
SERVICIO & SOPORTE

BATTERY BOX

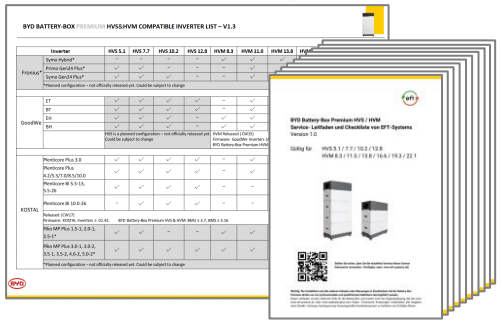
SERVICIO Y SOPORTE



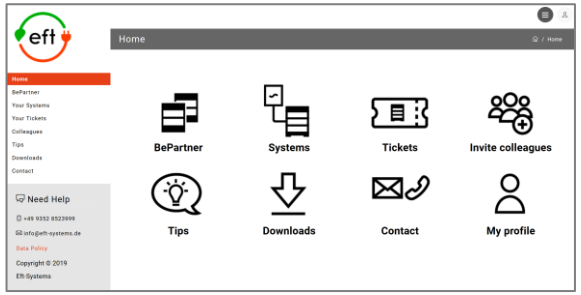
www.eft-systems.de



Help Center
(Traducir con
Google Chorme)



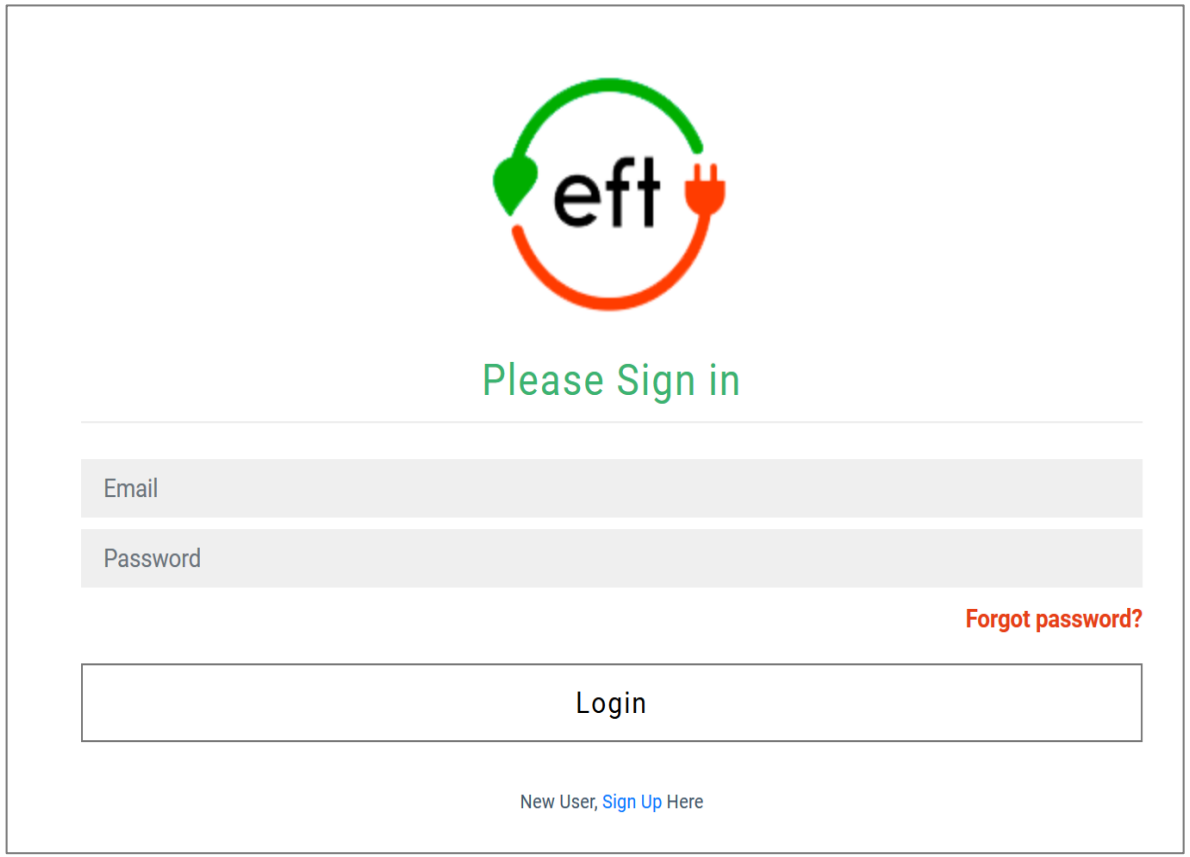
Documentos
(ej. Guía de ServicioChecklist)



Online Service Center

BATTERY BOX

https://support.eft-systems.de



a. Registro del instalador y el sistema en (https://support.eft-systems.de/)

b. Foto del Número de Serie del BCU master/BMU y del código QR

c. Foto del Número de Serie de cada módulo de batería y BCUs/BMU

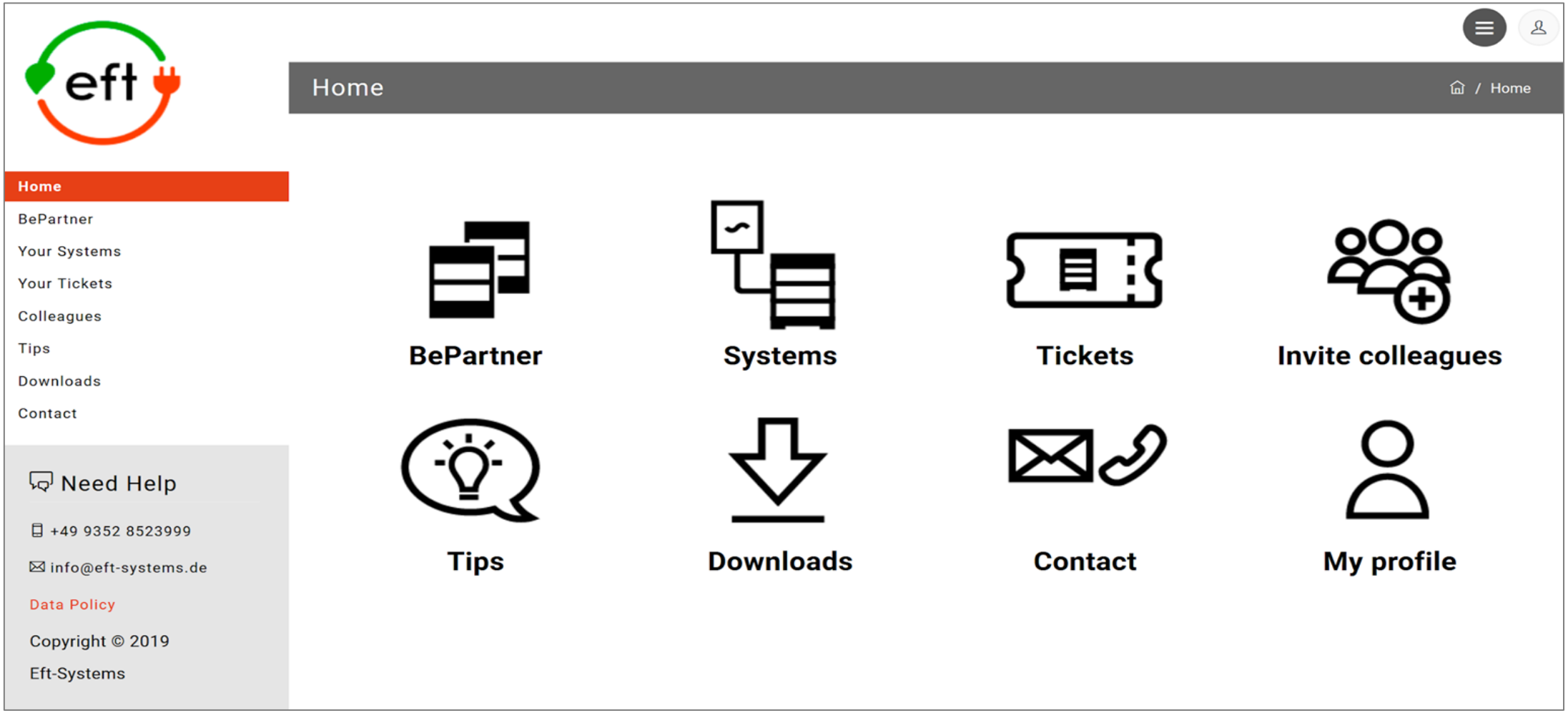
d. Vídeo del LED de los BCUs/BMU y BMSes

e. Acceso a monitorización del inversor

Adicional:
f. Si conectamos la batería a internet sería una ventaja excepcional. Del mismo modo que conectamos la monitorización podemos conectar el BCU master y así dar soporte remoto

BATTERY BOX

ONLINE SERVICE CENTER - HOME



BATTERY BOX

ONLINE SERVICE CENTER - HOME

- Puntos en nuestro **BePartner** Program al registrar Números de Serie de Módulos al crear un sistema.
- Todos sus sistemas con BYD **organizados** con un simple proceso de registro que no llevará más de 10 minutos.
- Añadir **tickets** para sus sistemas en caso de que no puedan contactar con nosotros.
- Registrar **Peticiones de Extensión** de sistemas como explicamos más abajo.

BATTERY BOX

ONLINE SERVICE CENTER – REGISTRO DE SISTEMAS

ADD NEW BATTERY-BOX SYSTEM

Battery-Box Premium HVS

Battery-Box Premium HVL

Battery-Box LVS

Battery-Box LVL

BATTERY BOX

ONLINE SERVICE CENTER – REGISTRO DE SISTEMAS

Battery Box HV

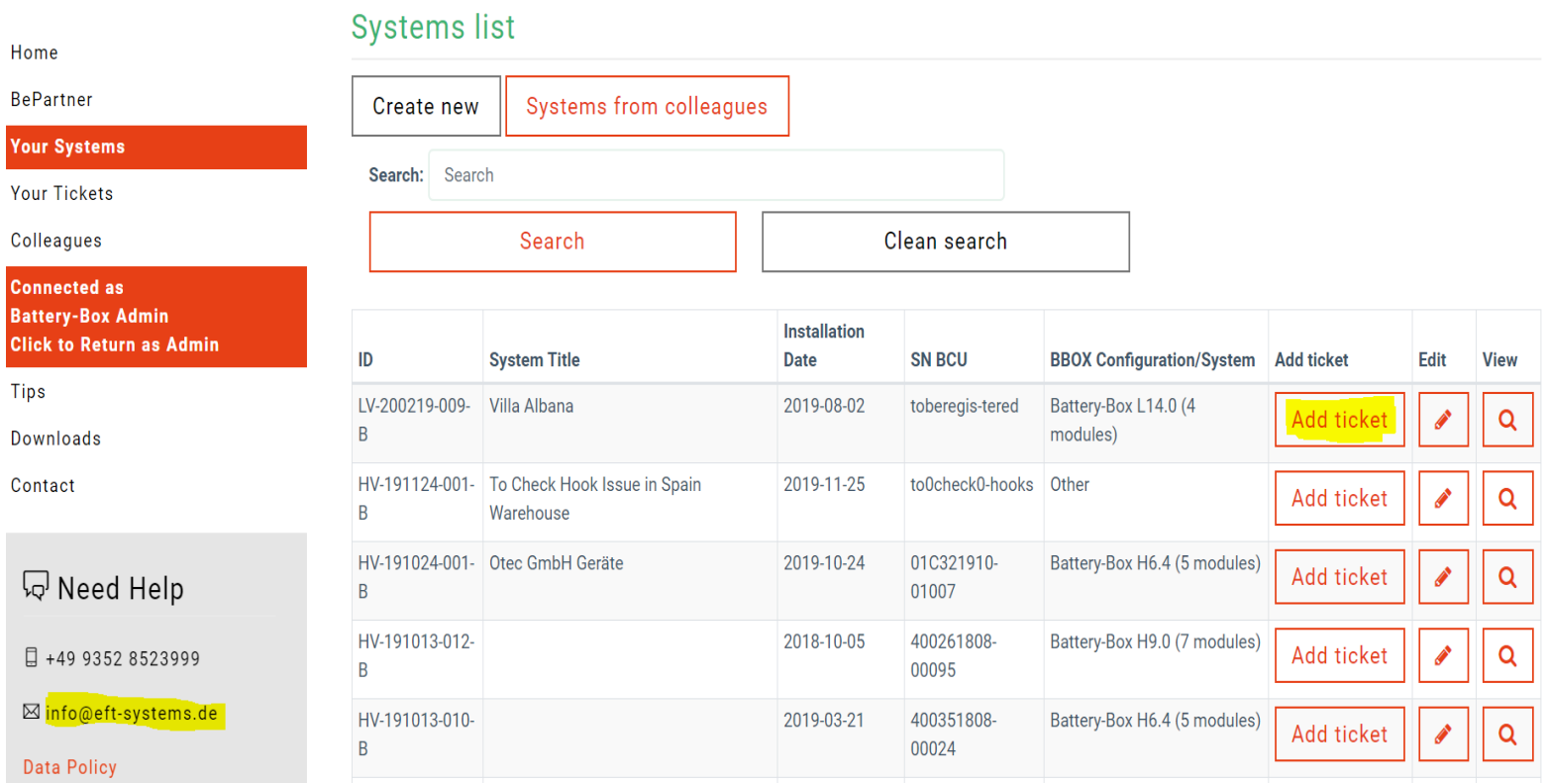
Battery Box LV

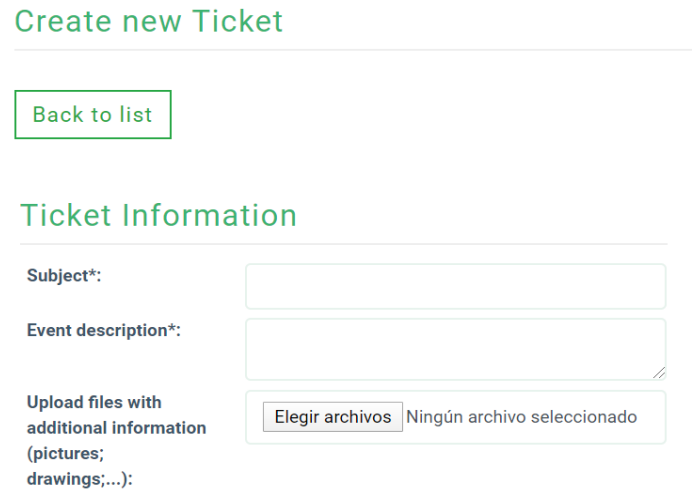
Battery Box Pro 2.5-10.0

Battery Box Pro 13.8

BATTERY BOX

ONLINE SERVICE CENTER – TICKETS





BATTERY BOX

ONLINE SERVICE CENTER – PROGRAMA BEPARTNER

My Actual Status

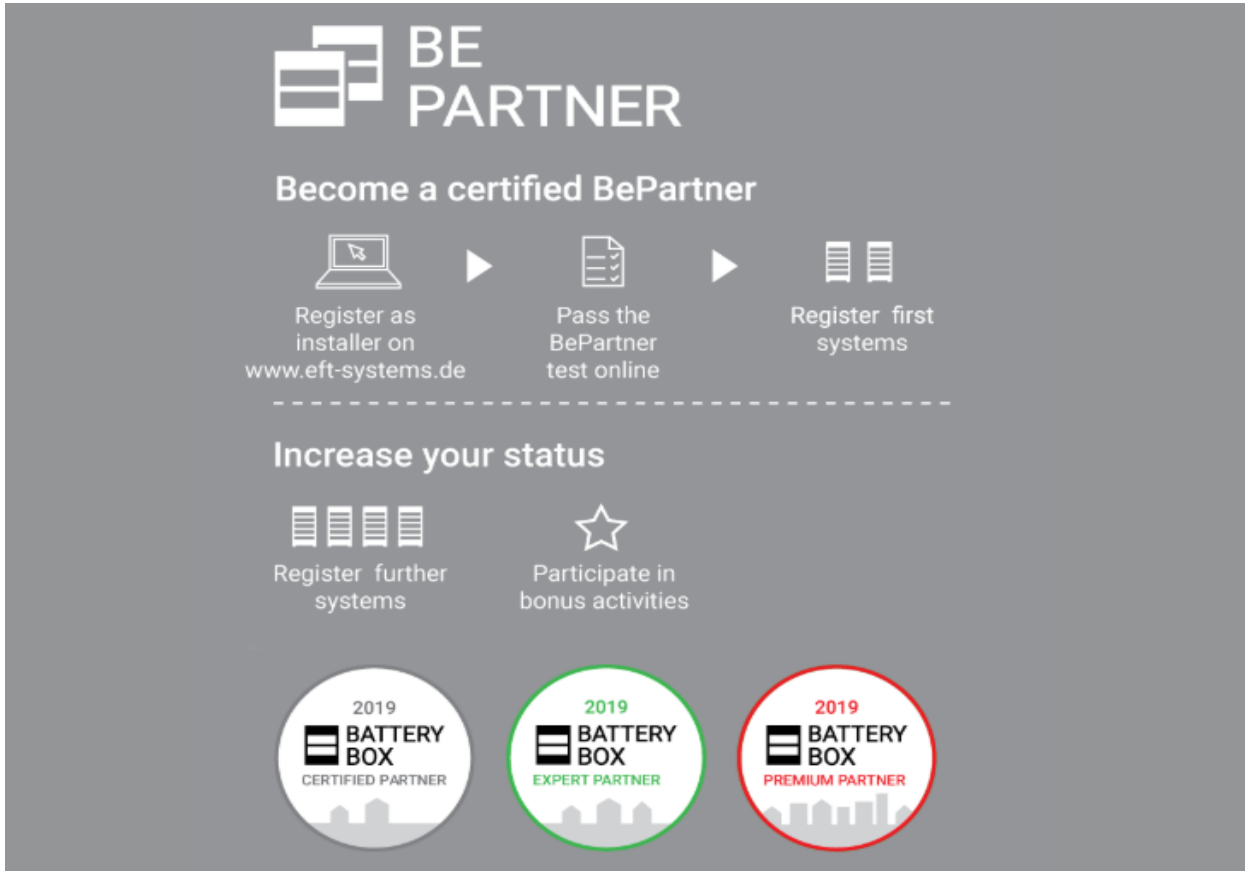
Registered Installer

BePartner Points

619

Status Points

619



BATTERY BOX

ONLINE SERVICE CENTER – EXTENSIÓN DE SISTEMAS ANTIGUOS

https://drive.google.com/open?id=1n4R8P3gj29nBR5C5UpswFzBUEPqfxgvB

1.

Registro del intalador y sistema

en https://support.eft-systems.de/login

2.

ADD EXTENSION REQUEST

en https://support.eft-systems.de/login

3.

EXTENSION ID

será enviada al E-Mail

4.

Realizar pedido normal DISTRIBUIDOR

con el Extension ID recibido

BATTERY BOX

GRACIAS POR SU ATENCIÓN

BATTERY BOX