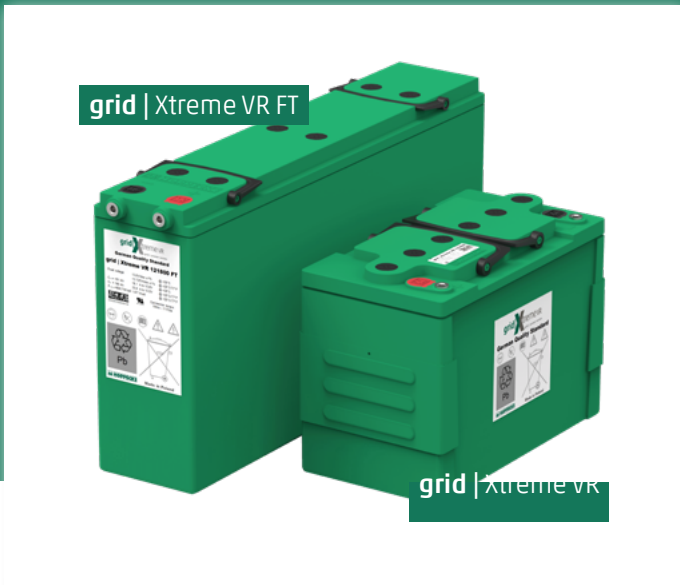


DATA SHEET

green series



The HOPPECKE grid | Xtreme VR is the next generation of real pure lead (99,98% purity degree) AGM batteries. HOPPECKE has deliberately opted for better corrosion resistance and thus for a very long service life even in high-current applications and high ambient temperatures, such as in telecom applications.

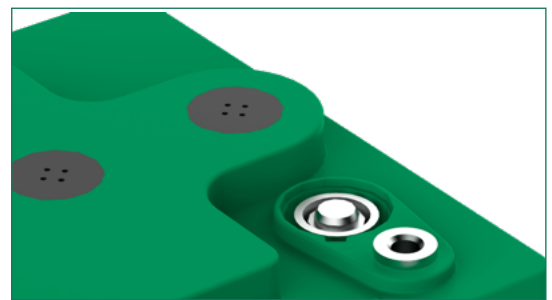
Proven ESS technology = reduced life cycle costs (TCO)

The result of Enhanced Stability Standard (ESS) technology is an improved resilience against thermal runaway, better charge acceptance and more even voltage behaviour of the battery. This leads to a longer service life and reduced service costs: in summary optimised life cycle costs.



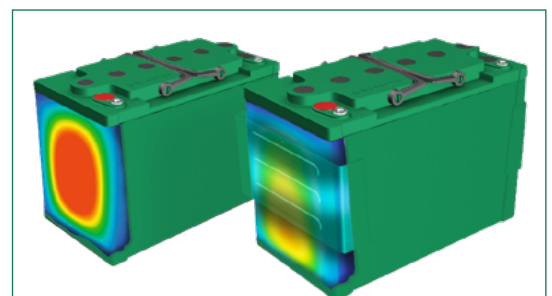
Unique dual-pole design = less service efforts

Dedicated pole contact points with touch protection allows for a precise impedance measurement making it quick and easy during installation and regular maintenance work.



Patented, innovative safeguard-tec = lower operational costs

The innovative safeguard-tec for the top terminal types (optional) ensures dimensional stability throughout battery lifetime and at elevated ambient temperature. This allows installation in cabinets or on racks with limited demand for a continuous cost-intensive air-conditioning.





Construction

- High Performance Pure Lead grid electrodes for very good corrosion resistance also under **elevated operating temperature**
- Active mass is designed for **high discharge performance** with good cyclability at the same time
- High-quality and low resistance microporous glass fibre separators combined with **ESS technology** ensures optimum charge carrier exchange and improves a **long-term stability**
- Fully isolated** HOPPECKE connector system
- Innovative plastic-overmolded dual-pole design with an **access for impedance measurements**
- 100% tested self-regulating pressure relief valve per cell to prevent interaction between cells of a block with backfire inhibiting for increased **operational safety**
- UL94 V-0** rated flame retardant ABS-PC material (halogen-free) - high heat, shock and vibration resistant
- 15 years** design life



Installation & Operation

- Suitable for standby parallel operation as well as partial cyclic applications
- Vertical as well as horizontal installation** on racks, in battery cabinets or in the grid | XtremeStack due to the robust folding handles integrated in the lid for easy assembly
- FT: **real front terminals** for an ease of installation and maintenance - no additional connectors needed
- TT: safeguard-tec optional available - **improves the overall performance** significantly
- Recommended charge float voltage: 2,3 Vpc @ 20°C (68°F) / 2,288 Vpc @ 25°C (77°F)
- Wide operating temperature range from **-35°C to +50°C**
- Storage time** extended up to **2 years** for maximum project deployment flexibility
- Reduced maintenance: no refilling of distilled water is required



Standards

- Designed to be compliant with international standard **IEC 60896-21/22**
- Usage in applications where longest life and highest reliability are required. Therefore, classified as **"Very Long Life"** (>12 years) according to Eurobat Guide 2015
- UL recognized** component
- UL94 V-0 rated flame retardant ABS-PC material (halogen-free)
- Classified as non-spillable battery and approved as non-hazardous cargo for land, sea and air transportation in accordance with the requirements of **ADR / RID, IMDG and IATA**
- Exclusively manufactured in HOPPECKE certified production facilities in accordance with **ISO 9001, ISO 14001, ISO 50001 and ISO 45001**

Type overview **grid** | Xtreme VR

Capacity, dimensions and weights



Type	C ₁₀ /1,8 Vpc @20°C (68°F)	C ₈ /1,75 Vpc @25°C (77°F)	P _{15 min.}/1,6 Vpc @25°C (77°F)}	P _{5 min.}/1,6 Vpc @25°C (77°F)}	Length L*	Width W*	Height H	Weight	Terminal	Fig.
grid Xtreme VR 122700	81 Ah	83 Ah	346 Wpc	679 Wpc	254 mm	174 mm	233 mm	~ 25,2 kg	M8 female	A
grid Xtreme VR 123600	108 Ah	111 Ah	465 Wpc	910 Wpc	320 mm	174 mm	233 mm	~ 31,7 kg	M8 female	A
grid Xtreme VR 124400	156 Ah	162 Ah	642 Wpc	1127 Wpc	359 mm	174 mm	283 mm	~ 45,4 kg	M8 female	A
grid Xtreme VR 125100	176 Ah	183 Ah	738 Wpc	1326 Wpc	498 mm	174 mm	233 mm	~ 50,4 kg	M8 female	A

*) +3 mm length (L1) and +5 mm width (W1) using optional safeguard-tec



Type	C ₁₀ /1,8 Vpc @20°C (68°F)	C ₈ /1,75 Vpc @25°C (77°F)	C ₃ /1,7 Vpc @25°C (77°F)	C ₁ /1,7 Vpc @25°C (77°F)	Length L	Width W	Height H	Weight	Terminal	Fig.
grid Xtreme VR 121000 FT 19"	94 Ah	98 Ah	91 Ah	77 Ah	404 mm	110 mm	264 mm	~ 29,6 kg	M8 female	B
grid Xtreme VR 121000 FT 23"	103 Ah	106 Ah	99 Ah	85 Ah	563 mm	125 mm	200 mm	~ 33,1 kg	M8 female	B
grid Xtreme VR 121500 FT	162 Ah	169 Ah	153 Ah	130 Ah	563 mm	110 mm	307 mm	~ 49,2 kg	M8 female	B
grid Xtreme VR 121800 FT	181 Ah	190 Ah	173 Ah	145 Ah	563 mm	125 mm	307 mm	~ 56,2 kg	M8 female	B
grid Xtreme VR 122000 FT	196 Ah	205 Ah	188 Ah	156 Ah	563 mm	125 mm	322 mm	~ 60,0 kg	M8 female	B

Fig. A

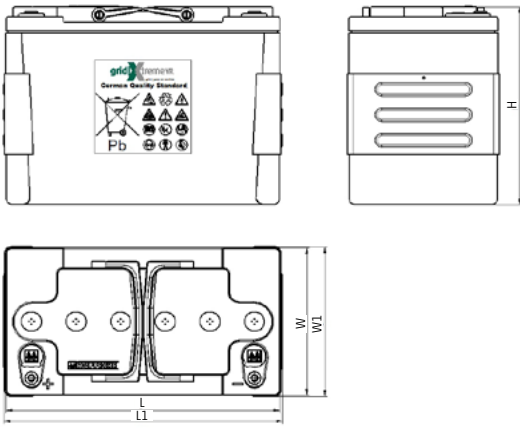
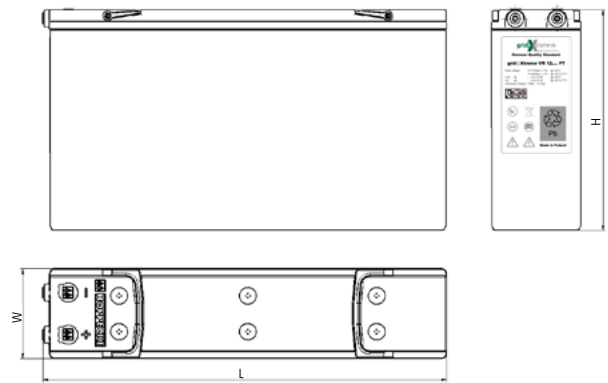


Fig. B



Tightening torque of terminal screw: 15 Nm - 133 lbf in

Applications **grid** | Xtreme VR

HOPPECKE's grid | Xtreme VR has been specially developed for



Data Center



Telecommunication



As a matter of fact, grid | Xtreme VR is versatile and may be used in other DC or AC industrial applications.

All of our cells and batteries should be installed, commissioned and operated in accordance with:

- HOPPECKE Operational Manual / Recommendations / Instructions
- International Standard IEC 62485-2 Safety requirements for secondary batteries and battery installations – Part 2: Stationary batteries
- Regional / National / Local Standards for the Environment

Optimal environmental compatibility - closed material cycle in certified recycling system