

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.



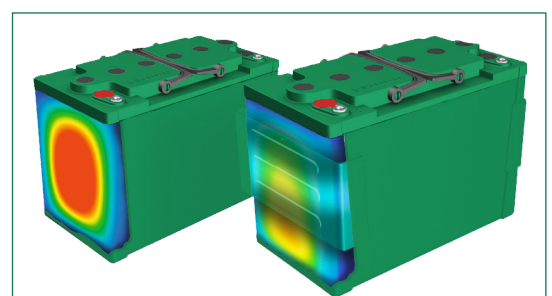
Unique dual-pole design = less service efforts

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 | 361 Wpc | 663 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 | 155 Ah | 161 Ah | 604 Wpc | 1054 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" | 93 Ah | 98 Ah | 89 Ah | 75 Ah | 404 mm | 110 mm | 264 mm | ~ 29,6 kg | M8 female | B |
| grid Xtreme VR 121000 FT 23" | 100 Ah | 105 Ah | 95 Ah | 80 Ah | 563 mm | 125 mm | 200 mm | ~ 33,1 kg | M8 female | B |
| grid Xtreme VR 12-1500 FT | 153 Ah | 160 Ah | 147 Ah | 124 Ah | 563 mm | 110 mm | 307 mm | ~ 49,2 kg | M8 female | B |
| grid Xtreme VR 12-1800 FT | 181 Ah | 190 Ah | 173 Ah | 145 Ah | 563 mm | 125 mm | 307 mm | ~ 56,2 kg | M8 female | B |
| grid Xtreme VR 12-2000 FT | 195 Ah | 204 Ah | 187 Ah | 157 Ah | 563 mm | 125 mm | 322 mm | ~ 60,0 kg | M8 female | B |

Fig. A

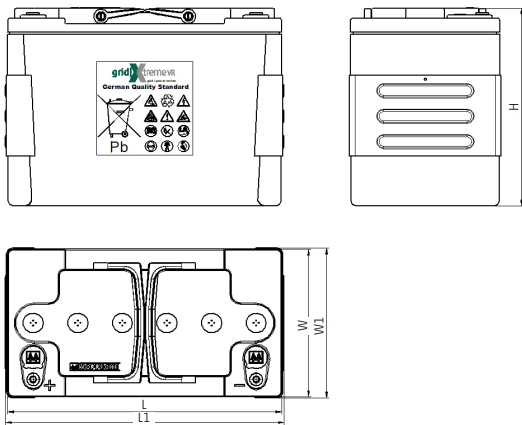
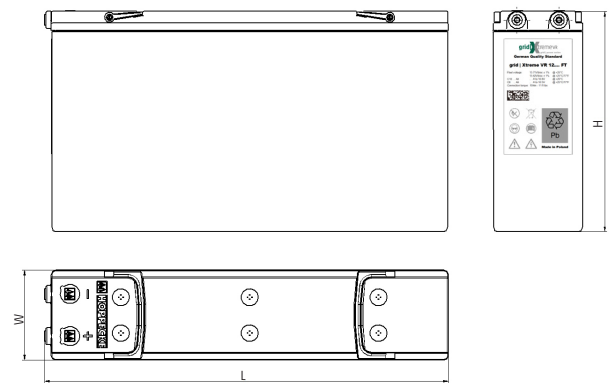


Fig. B



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

Applications **grid | Xtreme VR**

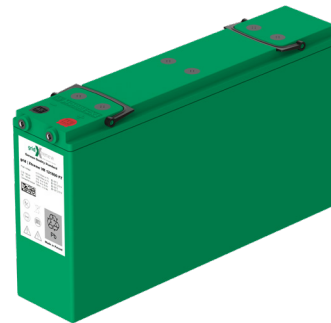
HOPPECKE's grid | Xtreme VR has been specially developed for



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

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