

## VRLA - AGM - Gel

**A valve-regulated lead-acid battery (VRLA)** sometimes called sealed lead-acid or maintenance free battery. There are three primary types of VRLA batteries, sealed VR wet cell, absorbent glass mat and gel cell. Gel cells add silica dust to the electrolyte, forming a thick putty-like gel. These are sometimes referred to as "silicone batteries". AGM batteries feature fiberglass mesh between the battery plates which serves to contain the electrolyte. Both designs offer advantages and disadvantages. Our deep cycle gel cell batteries arrive at your doorstep fully charged and ready for installation. A gel cell battery is a popular choice for motorized wheelchairs, RV's, golf carts, and marine applications.

AGM batteries differ from flooded lead acid batteries in that the electrolyte is held in the glass mats, as opposed to freely flooding the plates. Very thin glass fibers are woven into a mat to increase surface area enough to hold sufficient electrolyte on the cells for their lifetime. The fibers that compose the fine glass mat do not absorb nor are they affected by the acidic electrolyte. These mats are wrung out 2–5% after being soaked in acids, prior to manufacture completion and sealing.

A gel battery design is typically a modification of the standard lead-acid automotive or marine battery. A gelling agent is added to the electrolyte to reduce movement inside the battery case. Many gel batteries also use one-way valves in place of open vents, which help the normal internal gasses to recombine back into water in the battery, reducing gassing.

VRLA-AGM Battery for Telecom Applications. VRLA-AGM batteries are Valve-Regulated Lead-Acid batteries with Absorbed Glass Mat (AGM) separators.

We source a wide range of lead acid batteries for a variety of applications, including Gel and AGM batteries for standby use in float charge, traction batteries and deep cycle batteries