



Valley Industrial Center III
 5268 Valley Industrial Blvd. S.
 Shakopee, MN 55379
 Ph: 952-746-7528 Fax: 7527
 Email: info@hazebattery.com
 Web: www.hazebattery.com/usa

USING HAZE RELAY RACK SYSTEM SAVES YOU TIME AND MONEY

When a Telecom power engineer needs to replace the batteries in a Central Office or Communication HUT or Vault many customers ask for a 24 Cell System using 2 Volt Single Cells. Some prefer WET Flooded while others prefer VRLA (Valve Regulated Lead Acid) design.

When evaluating these types of applications we like to review some basic observations and system advantages with our customers. We break this down into three categories 2 Volt WET, 2 Volt VRLA blocks and 12 Volt VRLA blocks.

750 Ah TYPICAL SYSTEM @ 48 VDC

	WET / FLOODED 2 VOLT	VRLA 2 VOLT	VRLA 12 VOLT
Life	20 YEARS	10 – 12 YEARS	10 TO 12 YEARS
Size (foot print)	2 Tier Rack, 11 ft System Wt. 4972 lbs. Jar Wt. 182 lbs.	24.5 “ x 26.5” System Wt. 3568 lbs. 6V Module Wt. 446 lbs.	25.94” x 23.35” System Wt. 2400 lbs. 12V Jar Wt. 105 lbs.
Cost			
Handling	Lifts and specialized equipment	Lifts and specialized equipment	Technicians can handle without special tools
Installation Cost	Because of the size and weight of each jar this cost is higher than 12V blocks.	Because of the size and weight of each jar this cost is higher than 12V blocks.	Standard relay rack and preassembled shelves
Replacement Cost	Because of size and weight of each jar even replacing a single unit is typically contracted to outside company.	Because of size and weight of each jar even replacing a single unit is typically contracted to outside company.	Because of minimal weight per 12V jar and simplicity of intercell connector, in house replacement can be performed.
Maintenance	Daily/Weekly Pilot Cell Readings. Quarterly Individual Cell Readings. Annual inspection, torque and clean hardware.	Annual inspection, torque and clean hardware.	Annual inspection, torque and clean hardware.
Testing	Annual Load Test.	Annual Load Test. Quarterly resistance testing.	Based on user practice.
Redundancy	If one cell fails then plant voltage is too low to sustain system load.	If one cell fails then plant voltage is too low to sustain system load.	Because of multiple strings, N+1 redundancy is provided.
Expandable	If load increases then typically the battery plant must be replaced with a larger plant to accommodate additional load.	If load increases then typically the battery plant must be replaced with a larger plant to accommodate additional load.	User can add rack and battery tray assembly. Buy AH as the load increases.

“We provide a level of support on our products that will exceed your expectations”