



# Trojan Battery's Solar Signature Line Flooded SSIG 12 230: The Workhorse of Off-Grid Energy Systems

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## Why This Battery Makes Solar Installers Do a Happy Dance

most flooded lead-acid batteries die faster than ice cream in Phoenix summer. But Trojan's SSIG 12 230? This bad boy's built like a tank with solar DNA. Designed specifically for renewable energy systems, it's become the go-to choice for off-grid warriors and solar installers who hate midnight "why's-my-power-out" service calls.

## The Secret Sauce: Deep-Cycle Muscle Meets Solar Smarts

What makes the SSIG 12 230 stand out in the crowded battery market? Three words: deep-cycle endurance. While your car battery folds under pressure like a cheap lawn chair, this Trojan warrior:

- Handles 80% depth-of-discharge (DoD) like it's sipping margaritas on vacation
- Boasts 1,200+ cycles at 50% DoD - perfect for those cloudy week slumps
- Uses thick tubular plates that laugh at corrosion (take that, standard batteries!)

## Case Study: Powering Through an Alaskan Winter

When a remote lodge in Talkeetna replaced their aging battery bank with SSIG 12 230s, magic happened. Despite -40°F temps and 18-hour nights:

- Generator runtime decreased by 60%
- Battery water consumption dropped 45% vs. previous models
- Zero battery-related service calls all season

"It's like switching from a donkey to a snowmobile," the owner joked. Now that's cold-weather performance!

## Solar-Specific Design Features That Matter

Trojan didn't just slap a "solar-ready" sticker on this unit. The SSIG 12 230 packs clever innovations:

- Dual-purpose venting: Reduces water loss while allowing hydrogen escape (no explosive surprises!)
- High-density paste: Increases active material for longer cycle life
- Low-antimony alloy: Minimizes gassing and maintenance headaches

## The Maintenance Myth: Debunked

"Flooded batteries need constant babysitting!" cry the lithium fanboys. Not so fast. With SSIG 12 230's:

- Monthly checks take less time than brewing coffee



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Water top-ups needed only 2-3 times/year in most systems

Equalization charging is simpler than assembling IKEA furniture (and way less stressful)

Pro tip: Use Trojan's Hydrolink system and you'll spend more time checking TikTok than your battery levels.

## When Lithium Meets Flooded: The Hybrid Trend

Forward-thinking installers are mixing SSIG 12 230s with lithium batteries in hybrid systems. Why? You get:

Lithium's fast charge for sunny days

Flooded's reliability for deep discharges

Cost savings that make your wallet happy

It's like having a sports car and pickup truck in one garage - best of both worlds.

## Installation Pro Tips (From Grizzled Solar Veterans)

Want to make your SSIG 12 230s last longer than a Twinkie in nuclear winter?

Keep 'em between 50°F-80°F (batteries hate temperature swings more than cats hate baths)

Use torque wrenches for connections - loose terminals cause more problems than a teenager with a credit card

Implement proper ventilation unless you want your battery room smelling like rotten eggs

## The Recycling Advantage You Never Considered

Here's a kicker - flooded batteries like the SSIG 12 230 have a 98% recycling rate. Compare that to lithium's current 5-10% rate. When your system eventually needs upgrading (decades from now!), you can sleep knowing 38 pounds of lead and plastic won't end up in landfill.

## Cost Analysis: More Math Than a Netflix Documentary

Let's crunch numbers for a 10kWh solar system:

Lithium ion upfront cost: \$9,000-\$12,000

SSIG 12 230 bank (properly maintained): \$4,500-\$6,000

15-year cost per kWh: \$0.08 (flooded) vs \$0.12 (lithium)

Sure, lithium's sexier. But flooded batteries are like that reliable pickup truck - they just keep working.

## Future-Proofing Your Solar Investment

With Trojan's new Smart Carbon additive in SSIG plates, these batteries now handle partial-state-of-charge

## **Trojan Battery's Solar Signature Line Flooded SSIG 12 230: The Workhorse of Off-Grid Energy Systems**

(PSOC) cycling 30% better. Translation: they're ready for tomorrow's smart solar controllers and erratic weather patterns caused by climate change.

Web: <https://www.sphoryzont.edu.pl>