

GenStar™ MPPT

THE CHARGE CONTROLLER, REIMAGINED.

GenStar™ redefines what a charge controller can be. As a **complete system core**, it combines advanced MPPT charging, intelligent load control, battery intelligence, and complete network integration into a single, unified platform – with built-in cloud connectivity through **SolarConnect** and **LiveView** for instant local and remote monitoring.

Built-In Cloud Connectivity

Expandable by Design

Unified System Architecture

WHY GenStar?

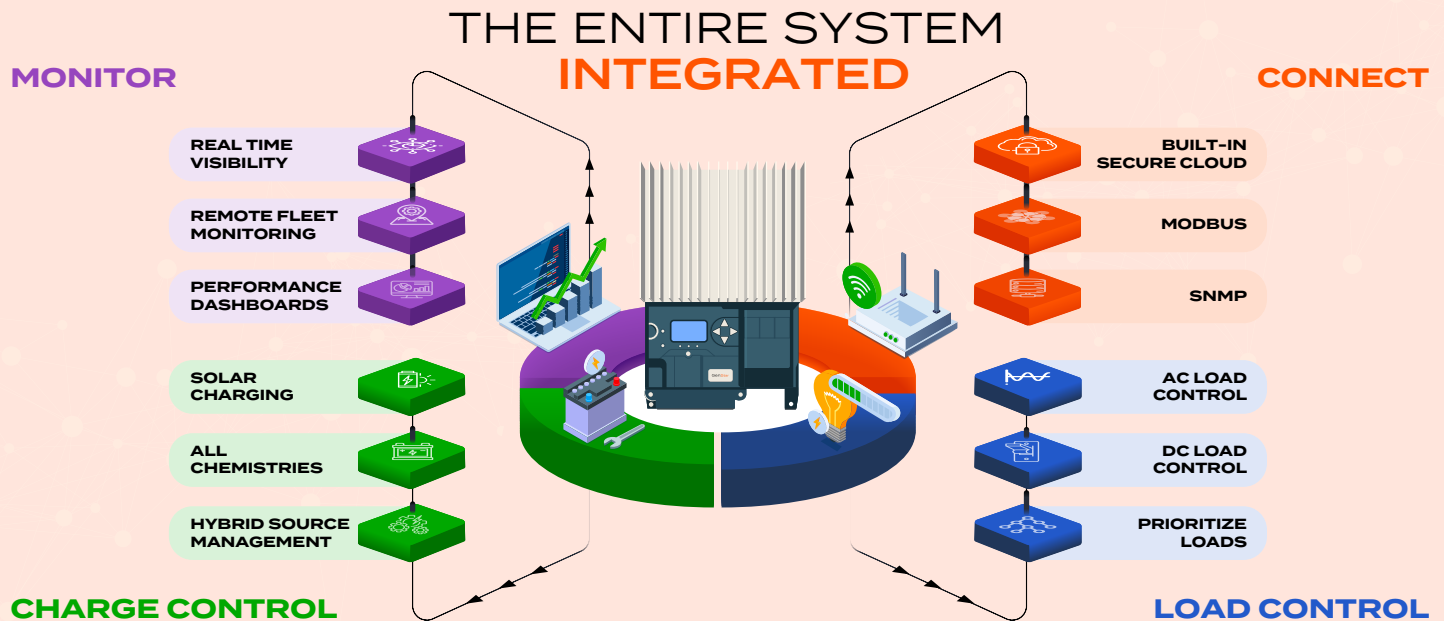
Because modern power systems demand more than charging.

Engineered to industrial performance standards and designed for continuous operation in the harshest environments, GenStar reflects the uncompromising quality that defined Morningstar for decades.

By consolidating multiple system functions into a single device, GenStar reduces wiring, minimizes configuration risk, simplifies commissioning, and improves long-term reliability.

One architecture. Everything essential. Built in.

GENSTAR IS THE FIRST CHARGE CONTROLLER ENGINEERED WITH NATIVE CLOUD CONNECTIVITY.



EXPANDABLE BY DESIGN:

The exclusive ReadyRail™ system enables snap-in ReadyBlocks™ that expand hardware and firmware capability without compromising system simplicity

- ✓ Battery Metering, SOC, current and energy tracking (ReadyShunt™)
- ✓ Full lithium battery communications and control (ReadyBMS™)
- ✓ Dry-contact signaling and advanced load control (ReadyRelay™)

UNIFIED SYSTEM ARCHITECTURE:

GenStar collapses previously separate system components into one engineered device

- ✓ MPPT charge control
- ✓ Intelligent load control (30A built-in)
- ✓ Advanced battery charging (Lithium, Lead-Acid, Ni-Cad)
- ✓ AGS/Hybrid Charging Source Control
- ✓ System-wide data aggregation and logging
- ✓ Software-driven architecture supports future updates

REDUCE COMPLEXITY INCREASE CAPABILITY

GenStar™ MPPT

ANYWHERE VISIBILITY

GenStar unlocks system visibility on your terms—local access with LiveView and the ability to utilize cloud monitoring through Morningstar SolarConnect.

LIVEVIEW

SOLARCONNECT



LOCAL ACCESS

- Built-in Local Web/Mobile App monitoring
- Near real-time system visibility
- On-site diagnostics
- No internet required



CLOUD ACCESS

- Remote system visibility
- Monitor from anywhere
- Fleet-level oversight
- Reduce unnecessary site visits

Simple Network Management
SNMP
ENABLED



THE FUTURE OF CHARGE
CONTROL, INTEGRATED.



Remote Telecom



Security



Traffic



Oil & Gas



Mining



Railroad

PERFORMANCE YOU CAN RELY ON:

GenStar is designed to support modern, high-demand power systems

- ✓ 200V solar input to support modern, large format modules
- ✓ Available in 60A, 80A, and 100A charge current configurations
- ✓ High-efficiency charging performance
- ✓ Oversized PV array input capability beyond 150% to support today's design practices

MORNINGSTAR-ENGINEERED QUALITY:

GenStar is industrial-grade, built for long-term deployment in demanding environments—where uptime isn't optional

- ✓ Fanless design for improved durability and uptime or long-term reliability
- ✓ Fewer components = fewer failure points
- ✓ Designed for continuous, unattended operation
- ✓ Over-spec electronics designed to survive the harshest conditions around the globe

