

CASE STUDY



Case Study: Future-Proof Commercial Solar Monitoring with Open, Revenue-Grade Data



Partnership Overview

Mana Monitoring specializes in integrated energy monitoring for both solar generation and electrical load consumption across commercial and industrial (C&I) portfolios. Serving both new construction and retrofit projects, Mana delivers open, flexible monitoring architectures that give asset owners full data ownership, redundancy, and long-term scalability.



Why eGauge

Mana Monitoring selected eGauge Systems as the cornerstone of its hybrid monitoring architecture based on several key differentiators:

- **Open data architecture** supporting long-term flexibility
- **Revenue-grade accuracy** suitable for compliance and SREC reporting
- **Ability to monitor solar production and electrical consumption in a single device**
- **Remote access and Modbus expandability**
- **Ease of installation and long-term value**
- **Responsive, knowledgeable technical support**





The Challenge

Commercial solar owners increasingly need **revenue-grade accuracy, diagnostic insight, and regulatory-ready reporting**, but traditional Data Acquisition Systems (DAS) often come with:

- \$8,000–\$12,000 in upfront hardware plus ongoing fees
- Vendor lock-in and limited future expandability
- Single points of failure
- Complex wiring and long installation timelines

Inverter-native platforms can be cost-effective, but they lack independent verification and financial-grade totals required for compliance, SREC reporting, and long-term asset management.

Mana Monitoring needed a solution that could deliver:

- Revenue-grade monitoring with redundancy
- Open data architecture
- Lower capital and operational costs
- Flexibility to scale into batteries, electrical load consumption, and future technologies

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“eGauge has been excellent—we can faster identify solar outages and solar underperformance.”

Zoltan Milaskey, Mana Monitoring CEO

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The Solution: Hybrid API + Revenue-Grade Metering

Sonic Rooftop Solar Project Example

System Size: 750 kW DC / 561 kW AC

Inverters: 17 SolarEdge inverters

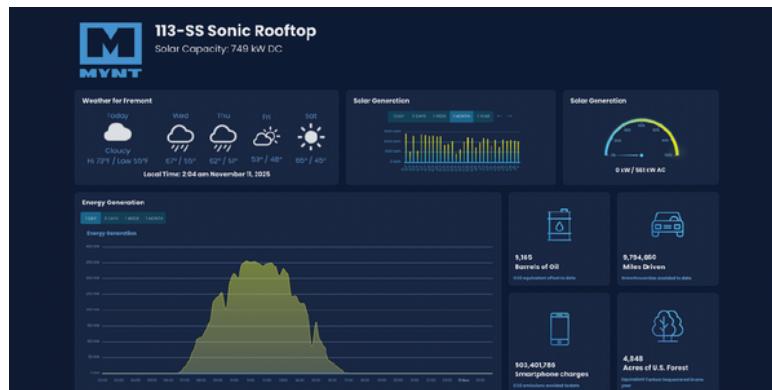
Modules: LG

Metering: eGauge Smart Meter

For the Sonic Rooftop commercial installation, Mana Monitoring implemented a **hybrid monitoring architecture**:

- SolarEdge inverter data is pulled directly via secure, real-time API—no additional hardware required
- An **eGauge** independently meters AC output at revenue-grade accuracy
- Both data streams are unified side-by-side in Mana's monitoring platform

This approach delivers inverter-level diagnostics alongside financially auditable production totals—allowing instant cross-checks, validation, and outage detection.



Feature	Traditional DAS	Inverter-Native Only	Mana Hybrid (API + RGM)I
Accuracy	High	Moderate	High - RGM verified
Redundancy	None	None	Dual sources
Cost (CapEx + OpEx)	High	Low	Optimized
Vendor Lock-In	Yes	Yes	No
Expandability	Limited	Limited	Full (BESS, loads, etc.)
Data Ownership	Vendor	Manufacturer	Client



Implementation & Adoption

Installation required:

- A single eGauge meter
- Zero Modbus wiring
- Minimal on-site labor

Mana's team reported a smooth deployment supported by fast, responsive eGauge technical assistance. Internal teams were able to learn the system quickly and handle training in-house.

Primary users include:

- Asset managers
- Property managers



RESULTS & BENEFITS

Since deploying eGauge-powered hybrid monitoring, Mana Monitoring and its clients have achieved:

- **\$8,000–\$12,000 saved** per project by reducing traditional, up-front DAS hardware fees and eliminating ongoing data access subscriptions
- **Reduced ongoing capital and operational costs**
- **Faster identification of solar outages and underperformance**
- **Improved equipment maintenance through granular production data**
- **Dual-source reliability**, eliminating single points of failure
- **Full data ownership**, free from vendor or manufacturer lock-in
- **SREC and compliance reporting using the revenue-grade meter**

Most importantly, operators can quickly identify underperforming assets and respond **before** issues impact revenue.



FUTURE-PROOF BY DESIGN

The hybrid architecture enabled by eGauge allows Mana Monitoring to seamlessly expand monitoring to:

- Battery Energy Storage Systems (BESS)
- Additional PV capacity
- Electrical load consumption via submetering

All without replacing existing infrastructure.



CONCLUSION

By combining eGauge's revenue-grade, open monitoring platform with Mana Monitoring's innovative API-driven architecture, commercial solar owners gain C&I-grade reliability at residential-level cost—without sacrificing data ownership, compliance, or future flexibility.

This partnership demonstrates how open systems and smart metering can redefine what's possible in modern commercial energy monitoring.

