

# Improve Plant Generation by 2 – 4%



## Optimize Performance & Asset Management with Digital Twins

Underperformance of plants hurts your solar project economics and ability to create new assets.

At our Asset Management's Core, is Digital Twin AI Technology.

We first build a detailed, personalized, digital replica of your plant. This bottom-up addition of yield expectations, for each and every instrumented device, gives you the most accurate estimate of generation capacity.

Next, we create, then leverage special purpose Digital Twins for identifying and quantifying shading, soiling, insulation, long term degradation, due diligence etc. This allows us to deploy true Condition based Maintenance.

Our custom-built Digital Twins, allow us to improve plant generation by 2 – 4%

### Digital Twin based CMMS

RealTime Monitoring, Reporting and Visualization across portfolio? Yes!

1 Source of Truth with Centralized Cloud Data Platform? Of course!

Built with Digital Twin AI at its core.

View and act on Revenue Quantified Automatic Tickets across:

- Alerts & Outages
- Preventative Maintenance & Predictive Maintenance
- Condition based Maintenance
- Actionable, Automated Revenue Prioritized Ticketing
- Accurate Needle-In-Haystack

All together, these provide real intelligence built into a Monitoring Platform, to guarantee maximum RoI for you.



## Snap-On Advanced Analytics



If you already have a basic CMMS (Monitoring) which makes you happy, no problem.

Our advanced Data Analytics can be snapped on to that monitoring solution.

You still get what we're known for – the ability to deliver real dollar value by driving performance, not just centralizing your data with pretty dashboards.

- Actionable, Automated Revenue Prioritized Ticketing
- Accurate Needle-in-Haystack
- Self-Service Advanced Data Analytics

All on RealTime dashboards, which deliver real RoI. Our dashboards are still pretty though.

## Remote Operations Center (ROC)



As you have a fast growing portfolio to manage, leave the Remote Operations to us. We can help you,

- Triage issues
- Coordinate Execution & Post-Fix Follow Up

## Forecasting



If required, our platform is also capable of accurately forecasting future production. In head-to-head tests, our generation forecasting was >98.4% accurate.

- With an optimized database tailored to every required location
- Ensemble of multiple weather sources for greatest accuracy



Sharat Singh (Engineering) & Dr. Hugh Hind (AI) bring learnings from long careers in Data, building Enterprise grade, secure products & Prediction/Anomaly Detection AI. Combining their Data & Deep Math expertise, allows us to build Digital Twins on which our Asset Management Platform with proprietary & patent pending Machine Learning rests.

Try us out with a No-Risk

## Plant Audit



Actionable Results in 7 Days

Give us 2 hours of time & 6 months of data.

We give you:

- Digital Twin AI based Performance Check showing historical & current losses with granular loss buckets for DC, Inverter & AC sides
- Issue Identification & Trend Analysis
- Revenue Prioritized Tickets, directly actionable by site teams to confirm accuracy of guidance (2-3 days)

This means:

- No risk, no disturbance to your current systems
- Time to Value = 10 Days Total (7 days for us, 3 days for you to confirm)

With high RoI, low upfront costs & 10 Day Time to Value, we put you on the path to 2 – 4% generation improvement.

“ Quadrical AI’s Digital Twin approach was instrumental in setting realistic expectations and then pinpointing areas of under performance that focused our teams’ efforts.

James Abraham  
Founder and Director, SolarArise

SolarArise

EMMVEE

vikram solar

M+ SOLAR  
AMPLUS SOLAR

Su-vastika SOLAR

Successfully deployed on 1500 MW of both Utility & Commercial/Industrial Solar Assets.



Future Proof & Extensible. Optimize Plant Performance for the Next 25 Years.