

**A robot that skillfully handles fluctuating high currents and
converts them into pure profit.**

IPC MONITORING



SUNGUIDE®



Imagine this:

Ten 20-ton rigs, fully loaded, chained in series, tearing down a two-lane highway like a freight train on steroids. Every engine screaming at full 20 A throttle. This convoy IS your solar string at high-noon peak irradiance — 200 tons per hour slamming into the grid.

Then one rig gets hit by dust or bird crap and its output craters to 0.5 A. In a conventional string, the entire convoy slams the brakes and crawls at 0.5 A. 200 tons/hour → 5 tons/hour. 95 % of the day's revenue literally evaporates on the asphalt.

Legacy DC-DC optimizers scream at the crippled rig: "Floor it, damn it!" It claws its way to maybe 3 A. The convoy limps along at 30 tons/hour. Still hemorrhaging 85 % of the payload.

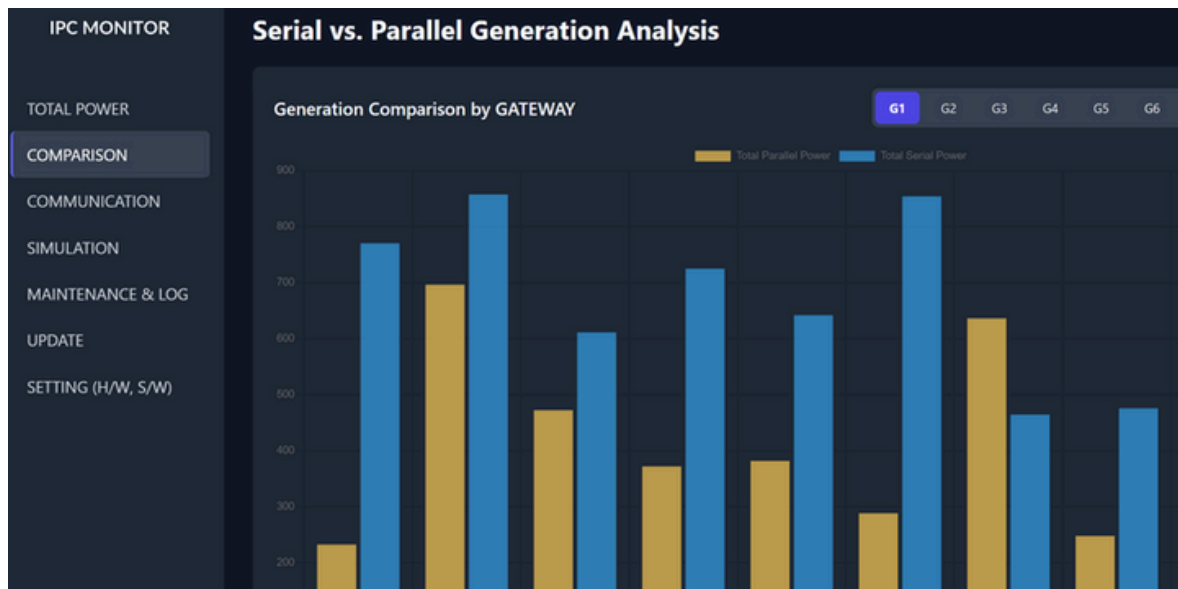
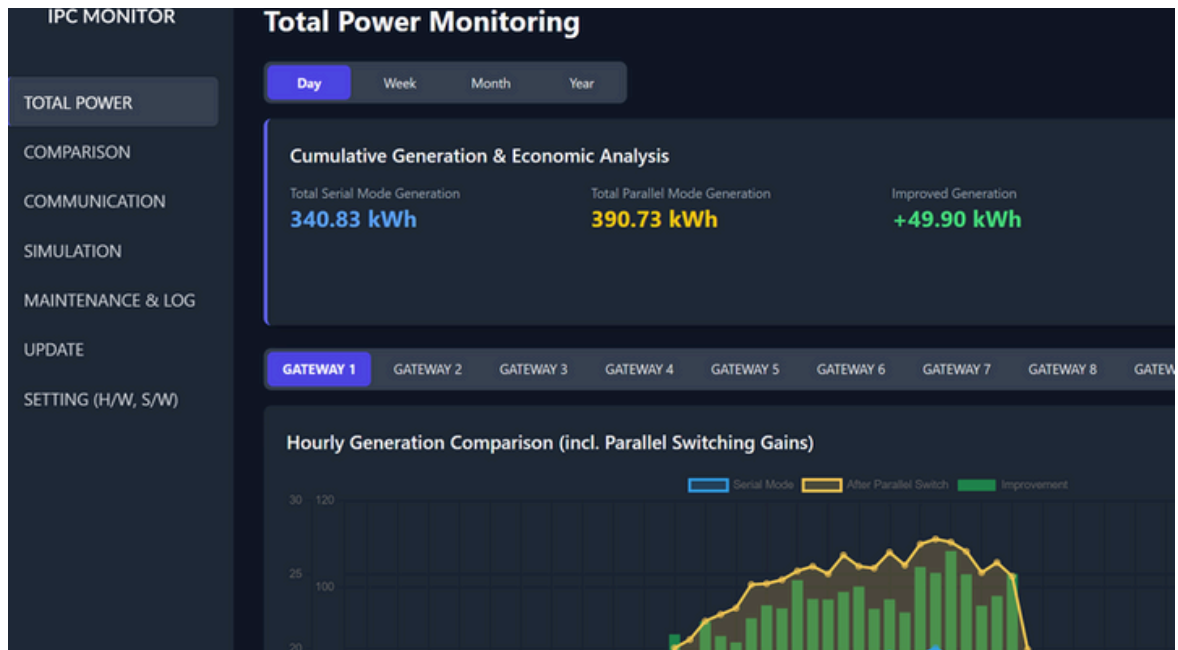
SUNGUIDE doesn't beg. In 100 milliseconds it rewrites physics itself. It throws new chains. In a tenth of a second it dynamically parallel-links the nine powerhouse rigs around the weak one and drags that dead-weight truck at full convoy speed. The strong rigs never lift off the 20 A pedal. The weak rig rides along, still carrying its own load. If voltage dips, it instantly flips segments back to series. Result: 195–198 tons/hour delivered. Near-zero loss. Near-zero heat. Zero drama.

This isn't an optimizer. This is a robot that sees current anarchy coming and rewires reality before the loss even registers.

While old-school systems panic and throttle every panel down to the weakest link, SUNGUIDE turns the weakest link into a free rider and keeps the convoy at maximum revenue velocity.

SUNGUIDE doesn't wait for perfect panels or perfect weather. It manufactures perfection out of imperfection — millisecond by millisecond.

The robot that masters current has landed. The helpless age of voltage obsession is dead. Welcome to the era of unstoppable yield.



IPC MONITOR

TOTAL POWER
COMPARISON
COMMUNICATION
SIMULATION
MAINTENANCE & LOG
UPDATE
SETTING (H/W, S/W)

System Communication Status

GATEWAY

GATEWAY 1GATEWAY 2GATEWAY 3GATEWAY 4GATEWAY 5GATEWAY 6GATEWAY 7

IPC MASTERS (Connected to GATEWAY 1)

Master 1Master 2Master 3Master 4Master 5Master 6Master 7Master 11Master 12Master 13Master 14Master 15Master 16Master 17

IPCs (Connected to MASTER 1)

1 V8.3/A4.6	2 V3.9/A0.6	3 V0.9/A2.4	4 V4.5/A1.0	5 V6.2/A2.1	6 V1.0/A3.7	7 V5.7/A4.5
11 V7.4/A4.2	12 V8.2/A1.6	13 V7.3/A1.4	14 V8.9/A1.9	15 V0.4/A1.7	16 V3.7/A4.1	17 V6.6/A3.5

MONITOR

POWER
COMPARISON
COMMUNICATION
SIMULATION
MAINTENANCE & LOG
SETTING (H/W, S/W)

Simulation Configuration & Execution

STEP 1. Load Real-time Data (Optional)

To use the current data from the live system as initial values for the simulation, click the button below. After loading t

Load Digital Twin Data

STEP 2. Set Simulation Values

Global Panel Settings (Apply to All)

Max Voltage (V)
55

Max Current (A)
AllS1S2

Rapid Shutdown Mod

Open Circuit Voltage (V)
60

Max Temperature (°C)

IPC MONITOR

TOTAL POWER

COMPARISON

COMMUNICATION

SIMULATION

MAINTENANCE & LOG

UPDATE

SETTING (H/W, S/W)

Maintenance & Event Log

Maintenance Alert List

Time	Target Device	Alert Type	Details
2025-11-19 10:54	GW_01-MASTER_03-IPC_11	Voltage Degradation	Panel voltage consist
2025-11-18 11:54	GW_02-MASTER_01	Communication Loss	Communication with
2025-11-17 11:54	IPC_MODULE-157	Overheating	IPC module temperat

Event Log

Timestamp	Level	Source
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TOTAL POWER

COMPARISON

COMMUNICATION

SIMULATION

MAINTENANCE & LOG

UPDATE

SETTING (H/W, S/W)

IPC MONITORGATEWAYIPC MASTERIPC

IPC MONITOR Configuration Service

System Operating Mode

Operating Mode

Simulation (Internal Mock Data)

System Connection Configuration

IPC MONITOR

TOTAL POWER
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MAINTENANCE & LOG
UPDATE
SETTING (H/W, S/W)

Firmware Over-the-Air (OTA) Update

Upload New Firmware

Version (e.g., 1.2.3)

Device Type

GATEWAY

Release Notes

Firmware File (.bin, .hex)

No file chosen

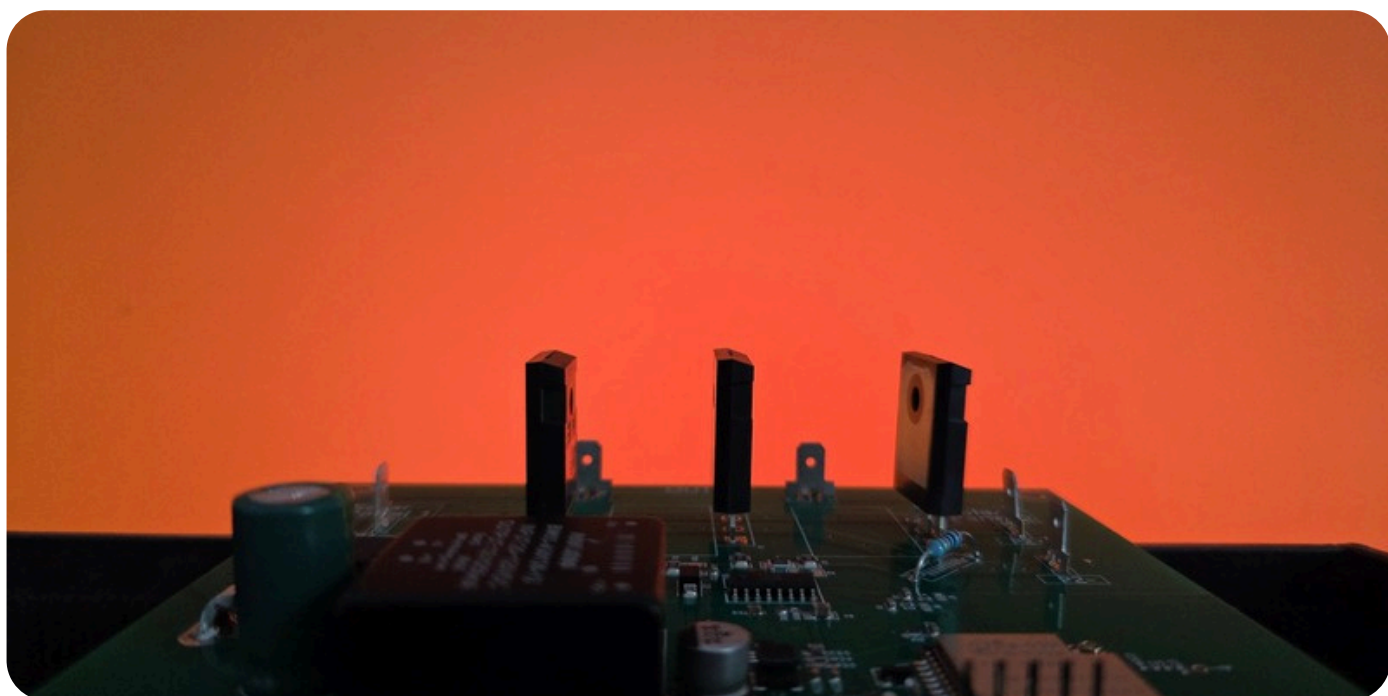


The high-current era has already begun. The only question left is no longer “Who will follow?” but “Who will stand with SUNGUIDE ?”
Are you ready?

Website with detailed information about SUNGUIDE (English, Chinese, Spanish, Arabic, Japanese)

<https://www.sunguide.kr/>

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SUNGUIDE®