



Visible Power Analysis, Actionable Insights

Cortex monitors every unit consumed 24/7 – catching energy waste, fire risks, and equipment failures before they cost you.

⚡ Power Saving

10%+

Energy savings

🔥 Fire Safety

24/7

Autonomous watch

⚙️ Predictive Maintenance

<1%

Unscheduled Downtime

*Figures are indicative and drawn from live customer deployments. Performance outcomes vary by facility, load profile, and operating conditions, and are subject to the implementation of corrective actions recommended by Cortex. Predictive maintenance capabilities are currently under active development.



Three problems. One device.

Most factories lose money in three invisible ways – Cortex detects all three, automatically.



Power Saving

Stop paying for electricity you aren't using.

- **Granular Costing** – Calculates exact energy cost per unit produced by filtering idle waste from active production, validated against machine runtime data.
- **Utilization Tracker** – Distinguish between expensive idling and revenue-generating production, giving true utilization data needed to make informed capex decisions.
- **Penalty Pre-Alerts** – Warns before Power Factor drops or Demand spikes, ensuring rebates instead of fines.
- **Cost-to-Load Scheduler** – Schedules high-load operations to available off-peak windows, optimizing TOD tariffs and sanctioned load.



Fire Safety

Catch faults before they turn into catastrophes.

- Detects loose connections & neutral overloading
- Catches over-temperature faults before a breaker trips
- Monitors earth leakage – a sign of insulation failure

Sends alerts before a fault becomes a fire



Predictive Maintenance*

Know a motor is failing weeks before it stops.

- Detects broken rotor bars and stator winding faults via current signature analysis
- Catches bearing wear early through vibration and thermal monitoring
- Monitors phase imbalance and harmonics – silent motor life killers
- Cross-checks electrical, vibration, and thermal data for high-confidence alerts

Gives you lead time to plan – not emergency callouts

* Full predictive maintenance capability – including rotor, bearing, and thermal diagnostics – is under development via integrated high-frequency current, vibration, and temperature sensing.

How it works

Cortex connects to your existing electrical panel in half a day. No rewiring. No production downtime.



01 – Install*

Clip-on device and sensors fitted to your existing panels and motors. Half-day job, Simple to install – nothing changes for your team.



02 – Connect

Cortex edge node goes online and begins reading and streaming data in real time. Works with any panel make.



03 – Analyse

Our algorithms run 24/7, building a fingerprint of your machines and detecting anomalies automatically.



04 – Alert & Dashboards

You receive actionable dashboard alerts – only when something needs your attention. Download custom reports as per your need.

✓ Works with any panel make

✓ No rewiring needed

✓ Half-day installation

✓ Realtime dashboard alerts and custom reports

* Cortex plugs into an LK 4410 multifunction meter (RS-485) – If an existing one is not present, we will supply the meter – a one-time installation of the meter by your site electrical team is all that's required to get started.

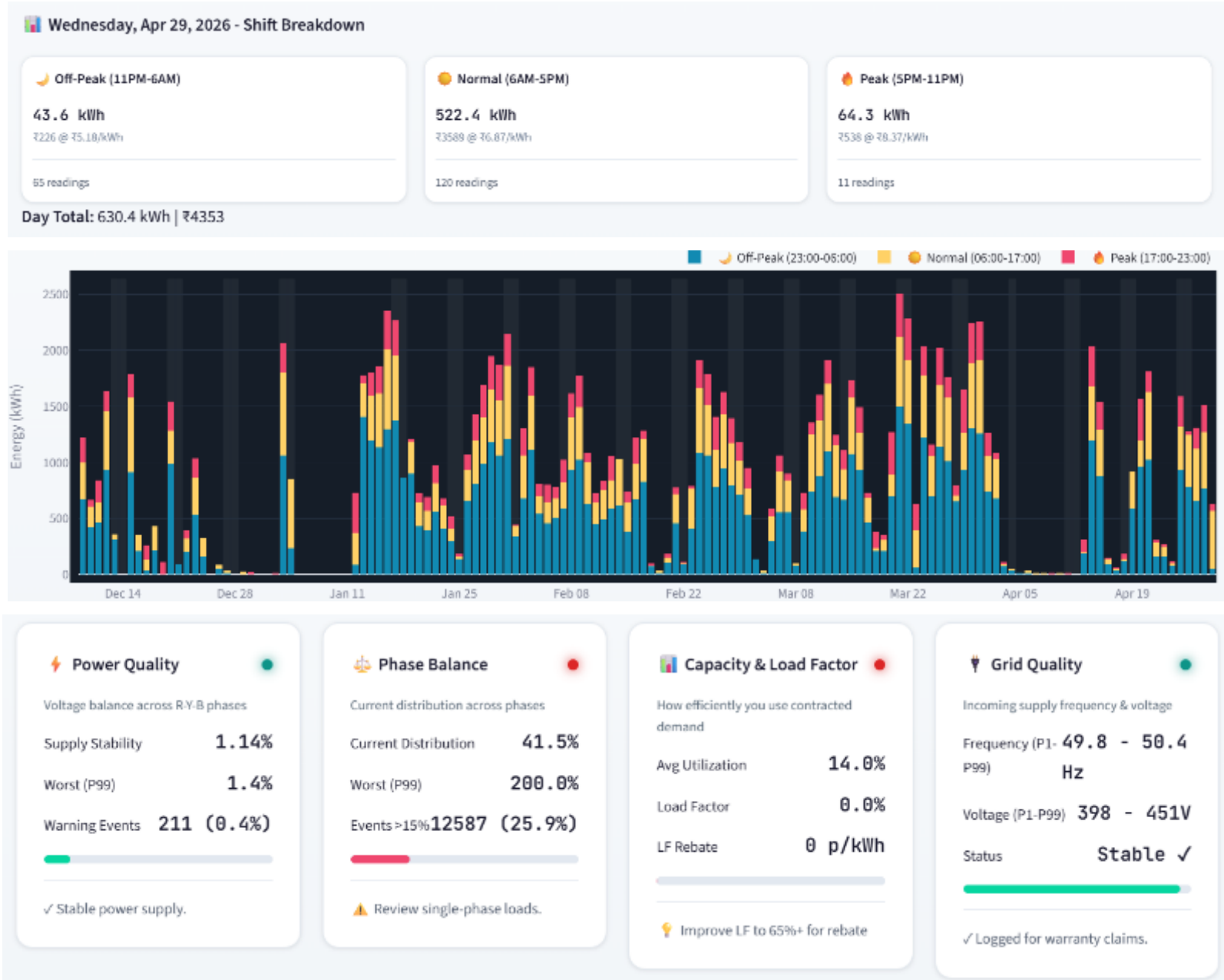
Cortex in Action

The hardware and live dashboard* – real data from a customer sites.



Cortex Edge Node

* Dashboard shown is limited and from a live customer deployment. Every Cortex installation comes with a custom dashboard – built around your machines, your tariffs, and your team's workflow.



TOTAL ENERGY
91,666 kWh

Period total

TOTAL COST
₹618,138

Estimated

PF Rebate/Surcharge

Power factor impact on billing

| | |
|------------------|------------|
| Normal (06-17) | 0.97 (+4%) |
| Peak (17-23) | 0.97 (+5%) |
| Off-Peak (23-06) | 0.96 |

✓ Earning 3.1% rebate

Live Dashboard Screenshots

