

7W ENERGIES

WORKPLACE ENERGY INFRASTRUCTURE

DEPLOYMENT MODEL · TECHNICAL REFERENCE

Reference architecture for workplace charging sites.

Hardware, electrical interfaces, networking, and operations - assembled and commissioned as one system.

PREPARED BY

7W Energy · Hyderabad, India

STATUS

Pre-seed · Pilot stage · v1.0

The physical and software layers of a 7W site.

Chargers	Networked AC at 3.3 to 22 kW per bay. RFID and UPI access. OCPP 2.0.1 over 4G + LAN.
Solar	Rooftop arrays from 100 to 800 kWp per site, grid-tied with net-metering.
Storage	Optional LFP battery storage, 100 to 500 kWh, for tariff arbitrage and demand response.
Metering	ABT-grade meters at the site interface, with per-bay sub-metering.
Site gateway	4G + LAN, edge compute for local load management and offline resilience.
Operations	Site console for FM, RWA and ESG officers: utilization, uptime, revenue, CO2.

Designed for uptime from day one.

- Smart load balancing** Dynamic kW allocation across stations, breakers, and the building's existing transformer. No upgrade required.
- Remote diagnostics** Charger health, communication, and energy telemetry available remotely 24x7.
- Commissioning support** Civil, electrical and network testing handed over to FM with operating runbooks.
- Managed operations** Predictive maintenance windows, SLA-backed uptime, and quarterly ESG exports.
- Commercial-grade hardware** Certified for Indian commercial deployment; IP-rated for indoor and covered parking.

STANDARDS

OCPP 2.0.1, OCPP 1.6J, OpenADR-ready. BRSR and IGBC reporting exports baked into the console.

Eight weeks from site walk to live network.

Week 1	Site assessment - electrical capacity, parking flow, tenant profile.
Week 2-3	Infrastructure design - single-line diagrams, load schedules, phased rollout plan.
Week 4-6	Charger deployment - commissioning, testing, RFID and UPI access live.
Week 6-10	Solar and storage - net-metering filings, BMS integration.
Ongoing	Operations and monitoring - predictive maintenance, ESG reports, demand response.

ILLUSTRATIVE PROJECTIONS

All numbers in this document are modelled projections based on Indian commercial tariff structures, AC charger benchmarks, and rooftop solar yields. 7W Energy is pre-seed and at pilot stage. Site-specific outcomes vary and are re-modelled after every assessment.