para

Para delivers a best-of-breed portfolio management platform for built environments that optimizes and facilitates operation and maintenance – helping make assets more energy-efficient, cost-effective, and sustainable. Para combines advanced cognitive analytics powered by deep machine learning and artificial intelligence to deliver the Para solution for every possible client use case; in any industry, anywhere in the world.

Led by visionaries with collectively more than 100 years of experience in digital twin technology and backed by 19,000 discipline-specific engineers, Para not only solves problems with energy performance management, system fragmentation, sustainability, space utilization, maintenance, and asset management; but is also transforming the world of the future: one building, and project at a time.

Asset Management

Accelerate the shift to proactive maintenance by dealing with faults before they turn into failures, avoiding costly downtime and enhancing equipment reliability.

Portfolio

View portfolio from a holistic perspective to gauge how well the ecosystem of assets function together.

Sustainability

Reduce greenhouse gas emissions and carbon footprint to lessen environmental impact

User Comfort

Improve human comfort and decrease cost incurred by unhealthy indoor environment

Energy Management

Improve operational efficiency by leveraging simulation and advanced analytics to identify waste and uncover hidden cost savings

powered by dar

Challenges & Solutions

Siloed Data

Para provides data integration, normalization, and analytics for all building and energy systems and acts as a bridge between enterprise and OT systems.

Energy Waste

Para identifies energy inefficiency gaps and supplies actionable intelligence to close these gaps and boost performance by up to 25%.

Predictive Maintenance

Para helps clients forecast equipment failures and develop strategies to detect and diagnose them in order to optimize key elements of equipment maintenance.

Asset Visibility and Spatial Intelligence

Para is an advanced digital twin, providing real-time 3D representation for every system, component, and data set.

Sustainability and Carbon Emission Management

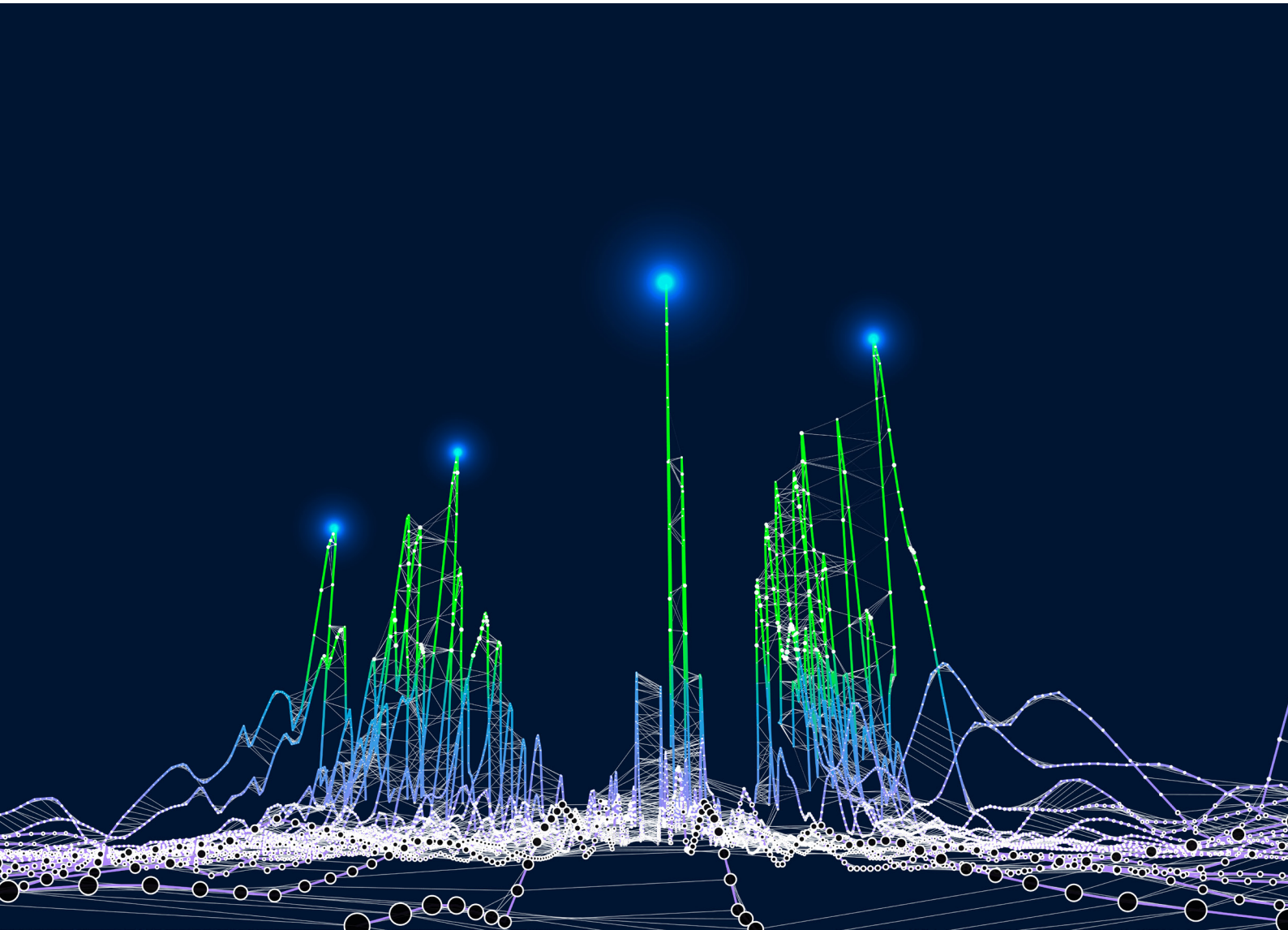
Para aligns with ESG reporting standards and provides hyper-granular visibility and planning toolsets for standalone buildings or building portfolios.

Ease of Use

Para has a user-friendly interface that does not require investment in specialized personnel.

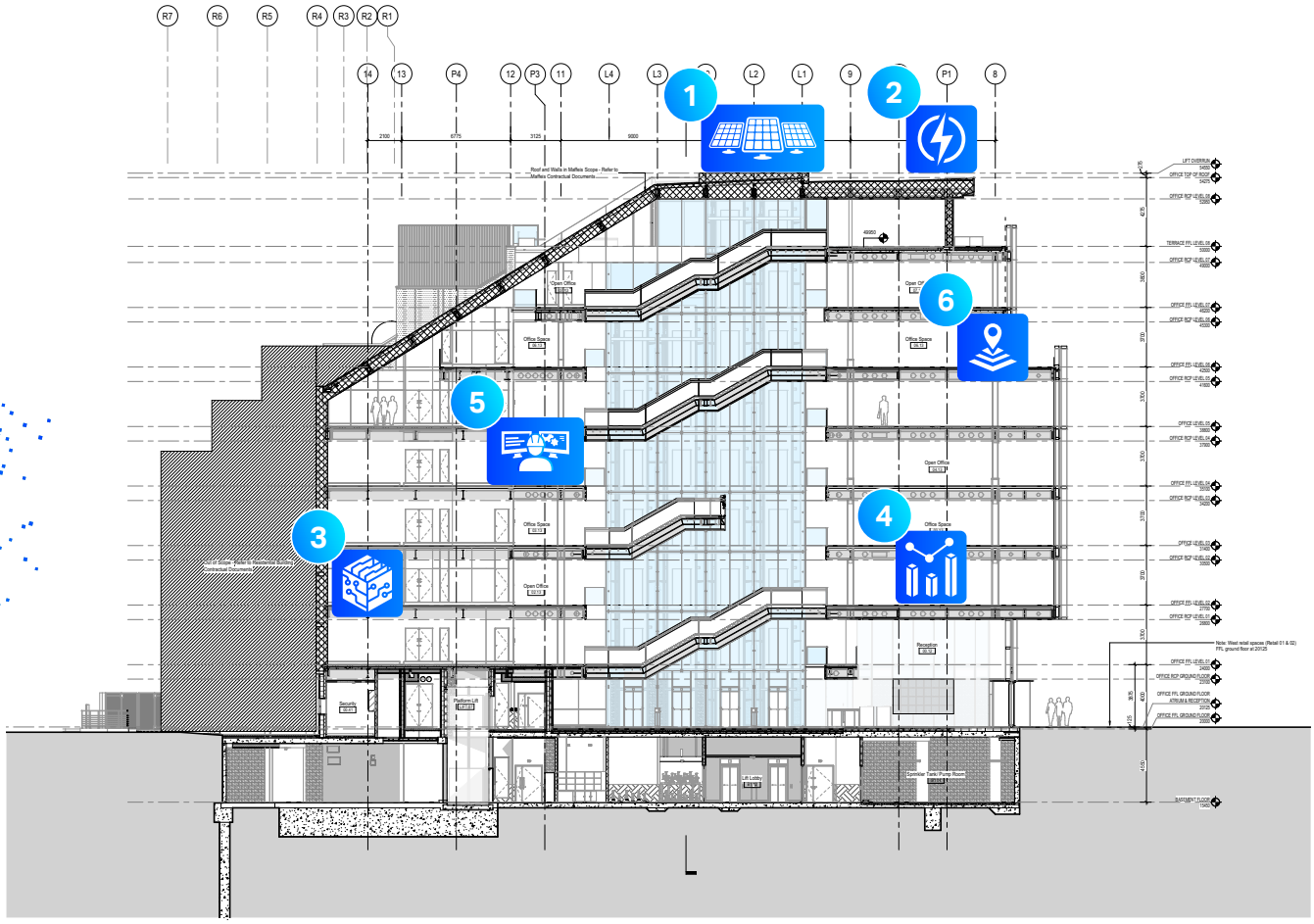
Underutilized Resources

Para uses available systems and data and does not require intensive updates or ongoing capital investment.

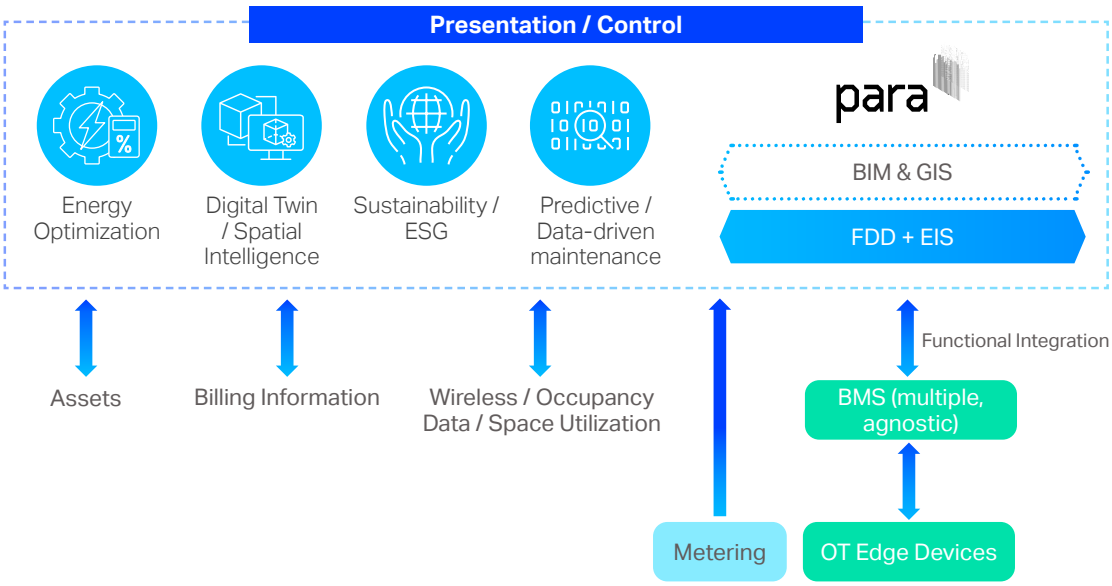


Six Ways Para Offers Value:

Para empowers organizations to harness the power of data in six key areas: Sustainability (1), Energy Intelligence (2), Digital Twin Technology (3), Fault Detection and Diagnosis (4), Asset Management (5), and Portfolio View (6).



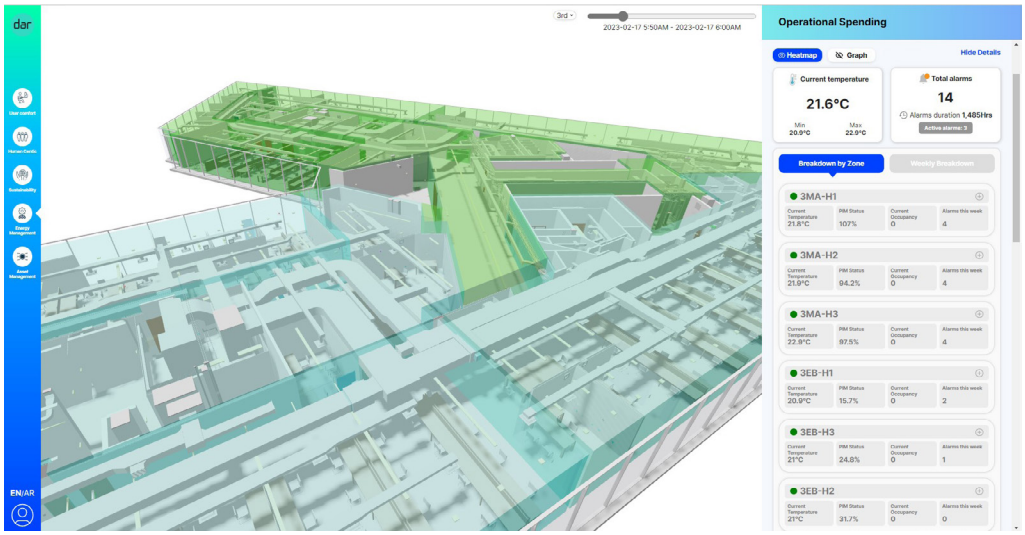
The architecture of Para is agnostic and seamless allowing numerous existing disparate data sources to be converted to a common language, then analysed by Para's powerful machine learning and AI engine to produce predictive, proactive, 24/7 insights.



1 Sustainability Management

Para empowers companies and developers to uphold their social responsibility to address climate change and meet their carbon neutrality pledges as well as ESG commitments.

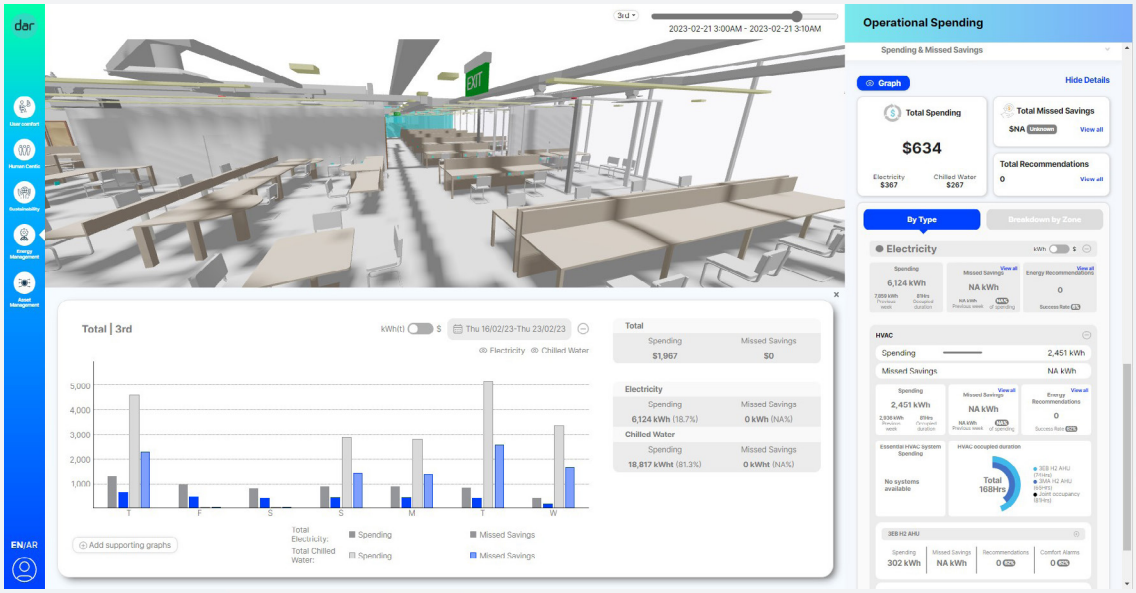
Our solution provides real-time monitoring of various environmental parameters as well as carbon emissions at the equipment level, by floor and by functional area.



- **Emissions:** Para tracks emissions in real-time, by floor, zone, system type, asset, etc., and provides enough context for the user to understand emissions and come up with carbon reduction measures.
- **Greenhouse gas usage intensity (GHGUI)** – Para introduces synthetic data (design simulations/ calculations) then measures and compares building performance to theoretical expectations to identify deviations and recommend remedial measures.
- **Indoor conditions:** Para monitors environmental parameters (temp, humidity, air quality, brightness, etc.) during periods of occupancy and alerts operators if any of these parameters are outside of an acceptable range, while offering powerful 3D interactive heatmaps that allow the Operator to demistify the reason behind it.

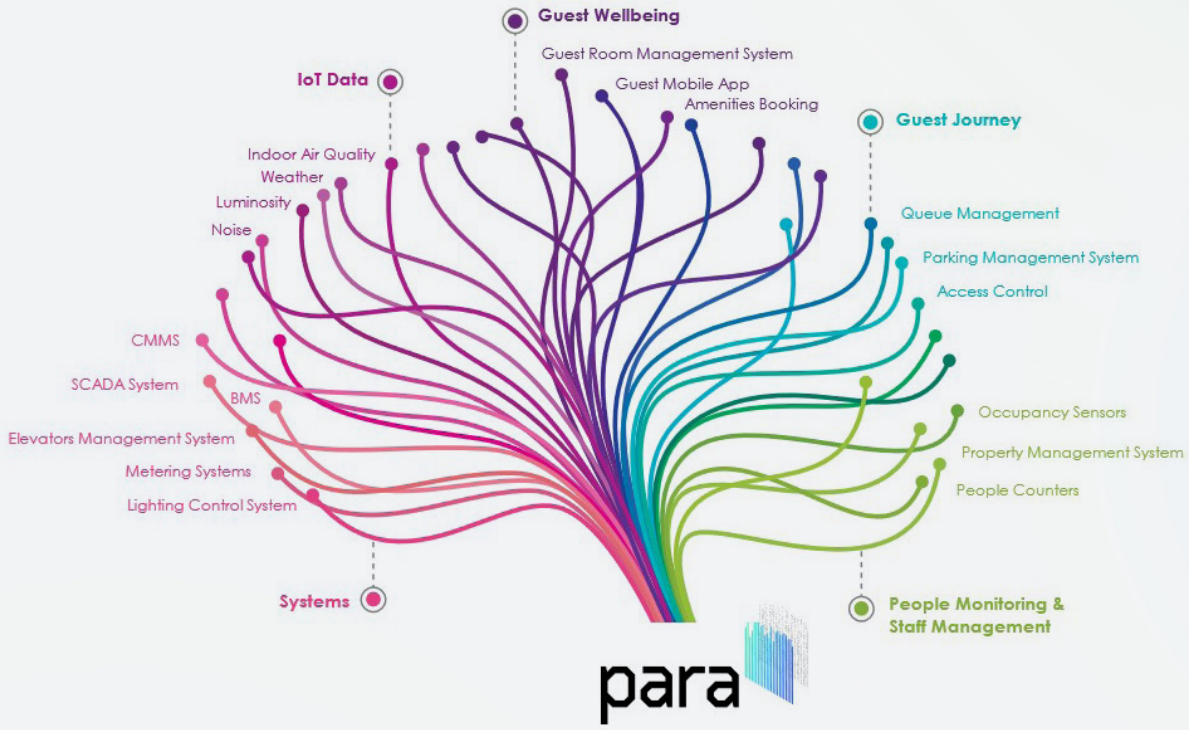
2 Energy Intelligence and Optimization

By visualizing and processing data from both existing and new sources, Para perpetually learns about the facility and its users, identifies inefficiencies and performance gaps, delivers energy information intelligence (EIS), and provides actionable recommendations to support decision making around energy performance optimization.



3 | Digital Twin Technology

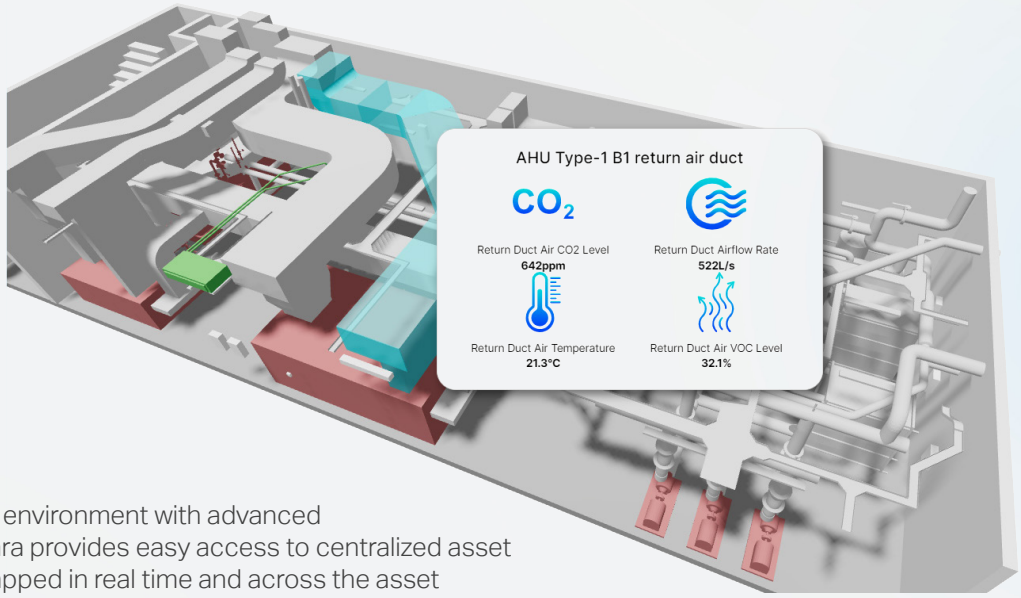
Para's digital twin technology feature offers granular spatial intelligence enabling owners to visualize how assets are performing in real time, oversee operation and management, and maximize asset value.



4 | Fault detection, diagnostics, and condition-based maintenance

Para provides fault detection and diagnostics by using advanced analytics to detect micro-deviations from set point parameters, pinpoint faults as soon as they occur, and conduct root-cause analysis to diagnose and resolve potential performance deviations and break-downs.

5 | Intelligent Asset Management



By offering a common data environment with advanced visualization capabilities, Para provides easy access to centralized asset information – with costs mapped in real time and across the asset lifecycle to facilitate financial decision-making.

- **A centralized repository:** Para stores technical information/documentation, datasheets, operation and maintenance records, manuals and all other pertinent information inside the digital twin model, allowing simplified and centralized access to all asset data.
- **Assets modelling in 3D:** Para provides asset modelling in 3D with associated static/live information for condition-based monitoring and inventory/resource management.

6 | Real-time Portfolio View

Para provides single source visibility of multiple building and infrastructure assets across wide geographies, leveraging GIS and digital twin visualization.

The Para Advantage

Market-Leading Active Digital Twin

Digital twin technology provides significant operational efficiency improvements - 25% in operational efficiency, 35% in sustainability, 20% in productivity, and 15% in space utilization. Para shatters the existing rules-based, industry-templated digital twin technology and leaps past Industry 4.0, creating autonomously connected ecosystems customized to each client environment, enabling maximum immediate and long-term value.

Digital Dashboard for Building Portfolio

Para provides a dashboard that is a single source of information tailored and customized to the needs and requirements of different operators. Para functions as an agnostic software overlay to OT, IT and IoT systems and vendors; Para turns disparate data sources into an operational digital twin to support intelligent decision-making.

Increases Operational Uptime

Para increases uptime by constantly monitoring critical equipment. It advises facility personnel of equipment faults with recommendations on problem resolution. Para allows holistic visibility of system performance before formal commissioning processes, providing design intent compliance.

Unique Machine Learning and Intelligence

Para uses deep machine learning capabilities to enable diverse value objectives – from real-time monitoring tools to entire autonomous programs that run simulations and automate interventions across portfolios.

Dedicated Team

The Para engagement and deployment team consists of highly trained operational, technology, and cybersecurity engineers. The Para team understands each client's business operation and project goals.

Cybersecurity and IT Integration

Every Para deployment begins with IT/Security coordination. We ensure that customer-directed security controls are integral to the design and deployment of a particular project.

Strategic Planning

A portfolio of facilities and assets can identify which facilities require asset replacement or repair. Para allows clients to make informed decisions about the cost and return on investment of equipment repair or replacement from both a cash outlay and environmental impact perspective.

Ongoing Support

Para SLA's are customized to the client's business need and operation; resiliency, stability, and 24/7 support are the foundational principles of the platform.

Created by World-Leading Domain Experts

Dar and its global partners have ranked within the top 10 international design firms in the building industry for over 15 years. We understand how buildings and utilities work, empowering us to design customized solutions to meet client goals and improve their business operations. Engineers with expertise in building energy management and data integrity drive Para project success.

Compliance

Legal and operational codes and regulation records are centralized and can be easily retrieved to demonstrate compliance. Para provides clients alignment with ISO5001, ISO14001, and WELL Standards/Occupant Well Being.

UL-Certified Smart Building Platform

Para is the first software platform globally to achieve UL Smart Building Systems certification.

This comprehensive program assesses the platform, collects functional evidence, and provides assurance the software is compliant across the following categories:

- Connectivity & Interoperability
- Functional Value
- Resilience
- Cybersecurity
- Digital Experience
- Control & Automation

Smart System Verified GOLD

HEALTHCARE

EDUCATION

POWER GRIDS & NETWORKS

CORPORATES

URBAN DIGITAL TWIIN

AIRPORTS

150H (London, UK)
Opened in 2023 in the heart of London, where utility expenses are exorbitant, implementing a powerful software overlay like Para, 150H is an example of a next-generation Smart & Sustainable building design, leveraging advanced technology and data management strategies to deliver a comfortable and healthy environment to its multiple tenants (while optimizing energy use and minimizing carbon emissions).

Smart Village Offices (Cairo, EG)
The striking architecture is just a cover for one of the most energy-efficient buildings in the region. Autonomy, Artificial Intelligence, and Machine Learning are the foundational technologies in the daily use of this facility – reducing energy consumption by 26% and providing an oasis for its occupants. The building was underutilized in terms of capacity and Para closed the gap between demand and use.

1315 Peachtree Street (Atlanta, US)
The Peachtree project achieved the coveted LEED Platinum certification during deep retrofit in 2012. The retrofit focused on environmental sustainability, the health and well-being of building occupants, and the surrounding community. In 2023, the Peachtree project became one of the first UL-certified Smart Buildings – where Para is perpetually improving the facility and its operation through the power of data.

powered by dar

Please scan QR code to discover more and connect with us