

CASE STUDY · IT PARK / COMMERCIAL

How Acropolis Tech Park Eliminated Manual HVAC Operations Across 12 Floors with EnSmart BMS

After existing BMS controllers, IO modules, and software became unstable and corrupted, Acropolis Tech Park partnered with EnSmart to deploy a fully integrated BMS solution.

Client: Acropolis Tech Park · System: EnSmart BMS · Deployment: 2023–2026 (Ongoing)

At a Glance

| | | | |
|---------------------------------------|------------------------------------|--------------------------------------|------------------------------------|
| 32+ AHUs Integrated | 4+ TFA Systems Automated | 12 Floors Controlled | 18 Days Full Deployment |
| 24/7 Centralized Monitoring | 100% HVAC Automation | 2023–2026 Stable Operation | Web/Mobile Remote Access |

The Challenge

Acropolis Tech Park already had HVAC systems installed, but the existing BMS controllers, IO modules, and software from another vendor became corrupted and unstable. Because of this, most building operations became manual. The building had 12 floors, and operators were manually visiting each floor daily to start and stop AHUs, change temperature settings, monitor HVAC operations, and handle alarms.

There was no centralized visibility, no reliable monitoring platform, and no data backup. The operations team spent significant time managing HVAC systems manually across multiple floors and shifts every day.

- Manual AHU ON/OFF operations required on every floor
- Existing BMS software became corrupted and unstable
- No centralized monitoring platform or real-time dashboard
- No historical data backup
- HVAC operations fully dependent on manual operator actions
- Operators had to physically visit every floor daily across multiple shifts
- Difficult fault monitoring and troubleshooting
- Multiple HVAC systems operated independently with no integration

"After the old BMS became corrupted and unstable, every floor required a manual visit. Operators spent entire shifts travelling floor-by-floor to start, stop, and adjust AHUs. There was no dashboard, no remote access, and no way to see the full building at once."

Why This Project Stood Out

This was a complete smart building retrofit inside a live enterprise facility — replacing a fully corrupted BMS without disrupting ongoing building operations.

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| Live Demo-Based Approval | EnSmart demonstrated controllers, IO modules, and BMS software directly to the client before deployment. |
| Full System Replacement | Existing corrupted controllers, IO modules, and BMS software were completely replaced. |
| Rapid 18-Day Deployment | Entire implementation completed within 18 days from client approval — including testing and commissioning. |
| Centralized Smart Monitoring | All 12 floors connected into one centralized monitoring platform with real-time visibility. |
| Mobile and Web BMS Access | Operators monitor and control HVAC remotely via mobile phones and desktop — no BMS room required. |
| Custom AHU Logic | AHU operations configured specifically for real site conditions and operational efficiency. |
| Reduced Manual Dependency | Operators no longer need to physically visit each floor for daily HVAC operations. |
| Long-Term Stable Operation | System has been operating successfully and continuously from 2023 to 2026. |

Who This Case Study Is For

Designed for large commercial buildings, enterprise facilities, and IT parks currently running manual HVAC operations or operating with unreliable, outdated BMS systems.

| Relevant Facility Types | Relevant Roles |
|-------------------------|---------------------------|
| • IT Parks | • Facility Managers |
| • Enterprise Buildings | • HVAC Engineers |
| • Smart Campuses | • BMS Engineers |
| • Commercial Towers | • Operations Teams |
| • Corporate Offices | • Energy Managers |
| • Industrial Facilities | • MEP Consultants |
| • Data Centers | • Infrastructure Managers |

Business Impact — What Changed After EnSmart Deployment

| Impact Area | Detail |
|------------------------------------|---|
| Centralized HVAC Operations | All AHUs monitored and controlled from one centralized platform across all 12 floors. |

| Impact Area | Detail |
|---------------------------------------|--|
| Remote Mobile and Web Access | Operators access and control HVAC remotely via mobile or desktop — no BMS room visit required. |
| Reduced Operator Dependency | Operators no longer need to physically visit every floor for daily HVAC operations. |
| Faster Building Operations | HVAC management became significantly faster — floor visits replaced by dashboard clicks. |
| Real-Time Dashboard Visibility | Live dashboards improved monitoring, alarm detection, and operational response. |
| Stable Automation Platform | New EnSmart controllers replaced corrupted systems with reliable, stable automation. |
| Better Shift Management | Operations that required multiple manual shifts became centrally manageable. |
| Better Temperature Control | Custom AHU logic improved airflow distribution and temperature stability across all zones. |
| Long-Term Reliable Performance | System has operated successfully without interruption from 2023 through 2026. |
| Future-Ready Infrastructure | Architecture supports future expansion, additional floors, and smart building upgrades. |

Before EnSmart, operators had to manually travel floor-by-floor in multiple shifts to manage HVAC. After deployment, operators could monitor AHUs, change temperature setpoints, control ON/OFF, and view alarms directly through the centralized BMS platform using desktop or mobile — removing the need to visit each floor or remain inside the BMS room.

Deployment Timeline — From Demo to Full Smart Building Automation

| Period | Milestone |
|-----------------------|---|
| August 2023 | Site study and operational assessment discussions |
| August 2023 | Live demonstration of EnSmart controllers, IO modules, and BMS software |
| August 2023 | Client approval received — retrofit planning initiated |
| September 2023 | Existing corrupted system replacement commenced |
| September 2023 | AHU integration and centralized dashboard configuration |
| Within 18 Days | Full deployment, system testing, and commissioning completed |
| 2024 – 2026 | Continuous successful building operations, monitoring, and optimization |

How the EnSmart BMS Works — Technical Overview

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|---|---|
| STEP 01 Controller Replacement | Existing corrupted BMS controllers and IO modules replaced with EnSmart hardware. All HVAC field devices — AHUs, TFA systems, sensors — reconnected to new EnSmart controllers. |
| STEP 02 Custom AHU Logic Configuration | AHU control sequences programmed for site conditions. Start/stop schedules, temperature setpoints, and operational modes configured per floor. |
| STEP 03 Centralized Dashboard Setup | All 12 floors connected to one centralized BMS dashboard. Real-time equipment status, alarms, temperature readings, and control visibility in one platform. |
| STEP 04 Web and Mobile Remote Access | Operator access enabled via desktop browser and mobile app. AHU ON/OFF, setpoint changes, and alarm monitoring available from any device — anywhere. |
| STEP 05 24/7 Continuous Monitoring | EnSmart BMS runs continuously — collecting data, managing automation, and delivering real-time visibility across all floors every day. |

What You Will Learn from This Case Study

- How corrupted BMS systems affect daily building operations and operator workload
- How centralized BMS eliminates manual floor-by-floor HVAC operations
- How mobile and web access transform facility management flexibility
- How AHU automation simplifies building management at scale
- How operators manage 12 floors effectively from one central platform
- How centralized dashboards improve fault visibility and alarm response
- How rapid 18-day retrofit deployment works inside a live enterprise facility
- How stable long-term BMS operation improves overall building efficiency

Frequently Asked Questions

What problem existed before EnSmart?

The old BMS became corrupted and unstable. Most HVAC operations were managed manually, requiring operators to visit every floor across multiple daily shifts.

How many systems were integrated?

32+ AHUs and 4+ TFA systems were integrated into one centralized platform.

Was the old system completely replaced?

Yes. Controllers, IO modules, and software were fully replaced with EnSmart hardware and software.

Can operators access the system remotely?

Yes. Operators can monitor and control all HVAC systems remotely through both mobile and desktop.

How quickly was the system deployed?

Full deployment — including testing and commissioning — completed within 18 days of client approval.

Is the system still operational?

Yes. The system has been running successfully from 2023 to 2026 with stable, continuous operation.

Built for Enterprise Buildings Requiring Real Operational Control

EnSmart delivers reliable Building Management System solutions for enterprise buildings requiring centralized HVAC automation, remote monitoring, and efficient facility operations. The Acropolis Tech Park project demonstrates how unstable and outdated building systems can be transformed into centralized smart operations using EnSmart controllers, software, and automation platforms — simplifying daily operations, reducing manual dependency, and improving operational visibility across all 12 floors.

The system continues to run successfully from 2023 through 2026 with stable building performance and centralized control.

Results at a Glance — Before and After EnSmart

| Area | Before EnSmart | After EnSmart |
|---------------------------|---|--|
| Manual Operations | Operators visited every floor daily across multiple shifts. | All HVAC managed from one centralized BMS platform. |
| System Reliability | BMS corrupted and unstable. | New EnSmart hardware — stable and reliable. |
| Remote Access | No remote access. Required physical BMS room presence. | Full mobile and web-based remote access from any location. |
| AHU Control | Manual ON/OFF on each floor individually. | Automated and remote AHU control from dashboard. |
| Monitoring | No real-time dashboard. No centralized visibility. | Real-time dashboard across all 12 floors with alarms. |
| Data Backup | No historical data backup. | Full data logging and historical trending. |
| Efficiency | High operator workload. Multiple shifts required. | Significantly reduced workload. Faster operations. |

Ready to automate your building?

EnSmart delivers BMS solutions for commercial buildings, IT parks, and enterprise campuses. We deploy centralized HVAC automation, remote monitoring, and smart building platforms.

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