



Semantic AI Energy Box

A Plug-In Solution for Effortless Energy Optimization Across Any BMS



Smart Energy Efficiency Without Boundaries

The DigiFusion Semantic AI Energy Box can optimize energy usage independently of the brand of Building Management System (BMS) installed. As an on-premises device, the Semantic AI Energy Box only requires 3 months of historical data to get started, leveraging a physics-guided machine learning approach that can adapt to the specific site conditions. This innovative approach allows the Semantic AI Energy Box to provide intelligent energy optimization without being tied to a particular BMS vendor, giving customers the flexibility to maximize their energy efficiency regardless of their existing systems.

Unique Technology

The **Semantic AI Energy Box** leverages **Physics-Guided Machine Learning (PGML)** to harmonize advanced algorithms with fundamental physical principles, ensuring accurate and energy-efficient control across your facility. Experience unparalleled efficiency with a solution that evolves with your needs, delivering intelligent, automated plant control with ease.

Features:

- **Minimal Data Requirements:** Only three months of historical data is needed to power the Semantic AI algorithms, delivering fast and reliable optimization.
- **Fully Automated Plant Control:** Take the guesswork out of energy management with hands-free control for ultimate operational efficiency.
- **Universal Compatibility:** Designed to seamlessly integrate with **any BMS brand**, ensuring a smooth transition for diverse infrastructures.
- **On-Premises Deployment:** Maintain complete control with full on-site deployment, keeping your data secure and accessible.
- **Flexible and Adaptive:** Tailored to site-specific conditions, enabling optimal performance in any environment.
- **Integrated System:** No additional servers or complex installations required, simplifying setup and reducing costs.

*All pictures and specifications are for reference only and are subject to change without prior notice.

Technical Specifications

Features

Dimensions

Mounting mode

Programmable Device

Rated Supply Voltage

Power Consumption

Ethernet Port

Communication Port Protocol

Operating environment

Fan

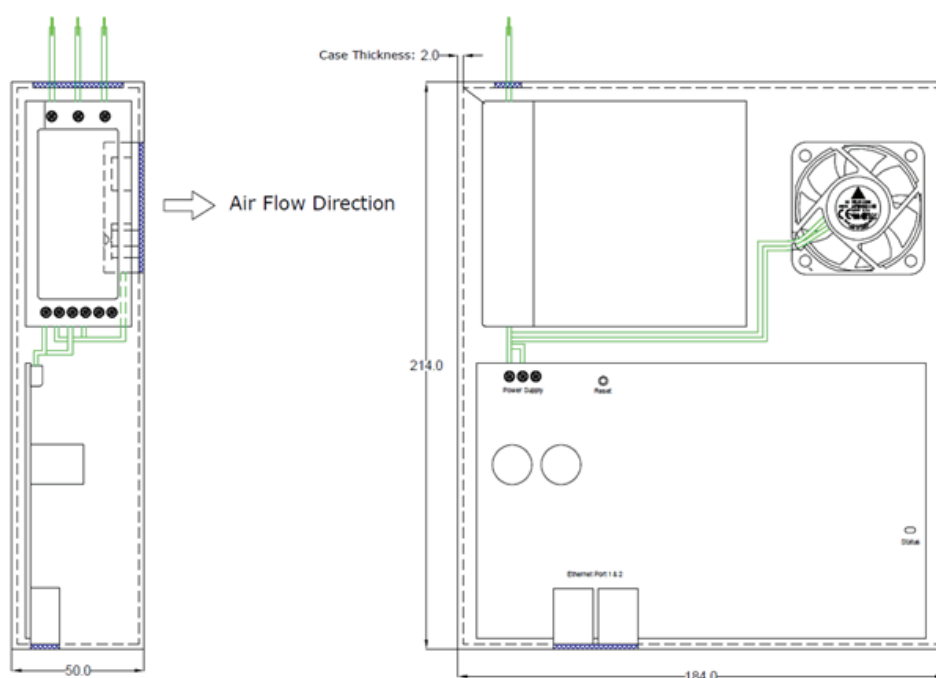
Material

Specifications

- Height – 220 mm
- Width – 182 mm
- Depth – 50 mm
- Panel-mounted
- Schneider Electric Room controller, SpaceLogic RP-C-12A-F-24V
- 24V AC+/- 15%
- 24 to 30 VDC =
- 23VA
- 2 nos. of 10/100BASE-TX RJ45
- BACnet IP
- BACnet MS/TP
- Ambient Temperature - 0 to 50 °C (32 to 122 °F)
- Humidity – Maximum 95% RH non-condensing
- Input power < 3W
- Speed - 5600 R.P.M.
- Acoustic Noise < 34 dB-A
- Max. Air Flow (At Zero Static Pressure) < 0.40 m³/min
- Max. Air Pressure (At Zero Airflow) < 6.10 mmH₂O
- Plastic flame rating – UL94-5VB
- Ingress protection rating – IP20

Dimensions

(mm)



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