

# CyPower®

# Smart Gateway And Power Controller Solution

Flexible dual Wireless and Wired Connectivity With Automatic Power Control



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#### AUTOMATIC POWER CONTROL Automatically switch 0n/Off power/ Ac based on room occupancy



### POWER USAGE MONITORING

Power consumption metrics for monitoring and billing purposes



#### CONFIGURABLE ALARM PARAMETERS

Set critical alarm parameters and notifications for security and personnel safety

## **Product Description**

The CyPower by CyPod Solutions is a versatile gateway and power management solution designed to enhance energy control, environmental monitoring, and operational efficiency across diverse applications. Powered by direct input, the CyPower supports both wireless (BLE, Wi-Fi) and wired (Ethernet) connectivity, enabling seamless communication with IoT devices and systems. It interfaces with BLE-enabled sensors and beacons, such as the CyBand bracelet, CyTag environmental sensors, and motion detectors, to gather real-time data on environmental conditions, including temperature, humidity, light levels, door status, and the presence of individuals in specific areas.

Equipped with an internal power relay, CyPower automates power switching to optimize energy usage, and it integrates with current sensors to provide detailed power consumption metrics for monitoring and billing purposes.



#### PEOPLE LOCALIZATION

Monitor employee numbers and positions for enhanced safety in demanding environments



#### DUAL CONNECTIVITY

Wireless via BLE and Wi-Fi Wired via Ethernet



#### MONITOR ENVIRONMENTAL CONDITIONS IN REAL-TIME

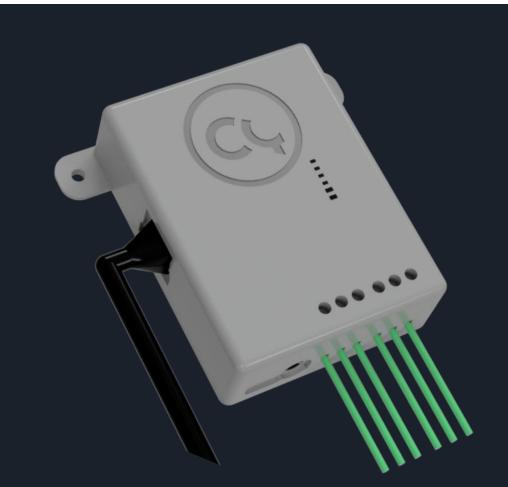
Temperature, humidity, shock, light, proximity, and others with CyTag™ Environmental sensor Tag CyPower bridges sensor data to the CyCore<sup>™</sup> backend server, which ensures secure communication for data processing and analysis. Then, the collected data is visualized by the CyDash<sup>™</sup> IoT management dashboard, an intuitive platform that allows users to monitor real-time metrics, respond to alarms, manage devices, and generate reports. For added flexibility, The Cypod IoT Management Platform supports seamless integration with customer ERP systems via API, ensuring compatibility with existing workflows.

This solution is ideal for energy saving and consumption optimization in hospitality, administrative sectors, and office space by automatically switching off the power or air conditioning in unoccupied rooms and restoring it upon occupancy.

It also excels in monitoring environmental conditions in critical areas, such as computer rooms and cold storage, to protect sensitive equipment and perishable goods from damage or spoilage. Additionally, CyPower enhances personnel safety in high-risk environments, such as construction sites, by integrating with BLE-based motion and presence detection systems.

Combining robust connectivity, intelligent power management, and seamless integration capabilities, the CyPower is a reliable solution for energy control, environmental monitoring, and IoTbased operational management.

# **CyPower**<sup>®</sup>



# **Use Cases and Technical Specifications**

- Automatic Power Control (ON/OFF)
- Power Usage Monitoring
- Real-Time Environmental Conditions Monitoring
- Enables Presence/ Motion Detection and Localization
- Dual Connectivity wireless via BLE & WiFI / wired via Ethernet
- Real-Time Alarms and Notifications



Power Saving and Consumption
Optimization in Hospitality,
Administrative Sectors & Office Space



Monitor Environmental Conditions in critical areas such as computer rooms and cold storage



Monitor and Track Employees in demanding environments and construction sites

# **Use Cases**

CyPower® is ideal for a wide range of applications, including power saving and consumption optimization in hotels and office settings. It also facilitates tracking and monitoring of environmental conditions in critical areas, such as computer rooms and cold storage, to protect sensitive equipment from damage and prevent perishable goods from spoiling. Moreover, it enables personnel tracking and monitoring in challenging environments to ensure their safety.

### **Technical Specifications**

Туре	Specification
Dimensions	90mm × 84mm × 26mm
Operational Temperature	-20°C ~ +60°C
Operational/Storage Humidity	Humidity 5-95% RH Non-Condensing
Power	Micro USB 5V/1A
Relays	2* 10A max current
Power Usage	Current Sensor
Antennas	Internal 1* Wifi, 1* BLE
Communication	Wi-Fi or Ethernet to server
	BLE to CyBand Bracelete, CyTag Environmental Sensor, PIR Motion sensors
WIFI Band	2.4GHz
Bluetooth	BLE 5.0 (BLE Mode: scanning and advertising)
MCU	NRF52832
Communication	
Protocol	MQTTS
Format	JSON
Encryption	SSL/TLS
LED Indicator	3 RGB
Material	ABS
Installation	Horizontal, hanging on wall or ceiling