Honeywell PW6K1IC

Honeywell ProWatch PW6K1IC PW-6000 Series Intelligent Controller Board User Manual

Model: PW6K1IC

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of the Honeywell ProWatch PW6K1IC PW-6000 Series Intelligent Controller Board. The PW-Series Modular Control System is an advanced access control hardware architecture designed for large enterprise applications. The PW6K1IC Intelligent Controller offers robust performance and flexibility through its 32-bit architecture, TCP/IP support, flash memory, extensive local cardholder database, and broad support for various reader and I/O modules.

2. PRODUCT OVERVIEW

The PW6K1IC Intelligent Controller Board is a core component of the ProWatch access control system. Below is an image of the board with key components highlighted.
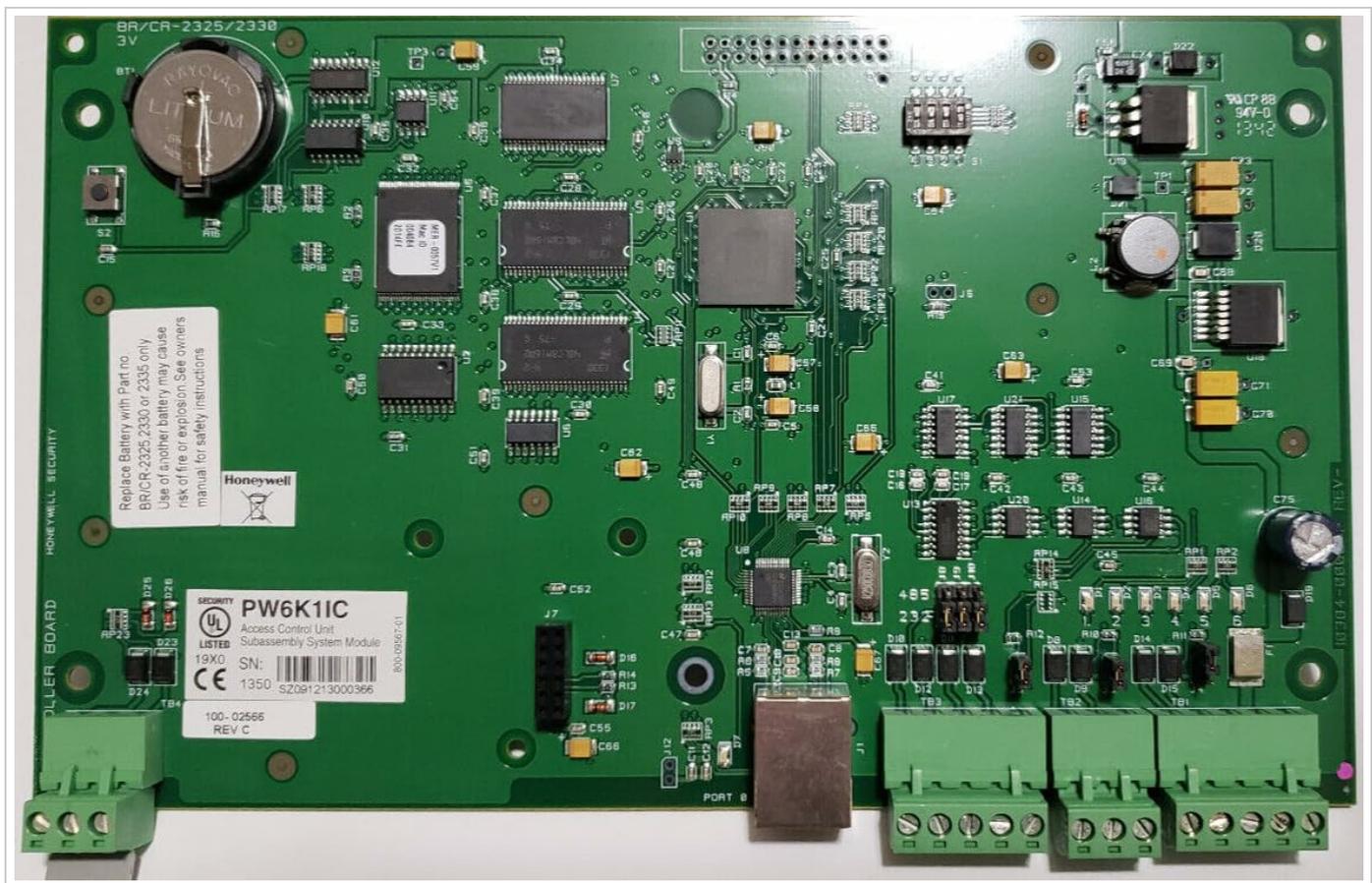
Figure 2.1: Honeywell ProWatch PW6K1IC Intelligent Controller Board. This image displays the green circuit board with various electronic components, including integrated circuits, capacitors, resistors, and connectors. Notable features include a circular lithium battery (RAYOVAC LITHIUM BR/CR-2325/2330 3V) in the upper left, multiple green terminal blocks for wiring connections along the bottom, and a label indicating "PW6K1IC Access Control Unit Subassembly System Module" with UL and CE certifications.

Key Features:

- Provides power and flexibility with its 32-bit architecture.
- Equipped with flash memory for reliable data storage.
- Supports TCP/IP for network communication.
- Manages a large local cardholder database.
- Supports a wide range of reader and I/O modules.

3. SETUP AND INSTALLATION

Proper installation is crucial for the optimal performance and longevity of the PW6K1IC board. Always ensure power is disconnected before handling the board.

3.1 Mounting the Board

Mount the controller board securely within an appropriate enclosure, ensuring adequate ventilation and protection from environmental factors. Use non-conductive standoffs to prevent short circuits.

3.2 Wiring Connections

Connect power, network (TCP/IP), readers, and I/O modules to the designated terminal blocks and ports on the board. Refer to the system wiring diagrams for specific connection details. Ensure all connections are secure and correctly polarized.

- **Power Input:** Connect to a stable power supply as specified in the technical specifications.

- **Network (PORT 8):** Use an Ethernet cable for TCP/IP communication with the ProWatch server.
- **Reader Connections:** Connect access control readers to the designated reader ports.
- **I/O Module Connections:** Connect input/output modules for door contacts, request-to-exit buttons, and other auxiliary devices.

3.3 Initial Configuration

After physical installation, power on the board and proceed with initial network configuration and integration with the ProWatch software suite. This typically involves assigning an IP address and registering the controller within the system.

4. OPERATING THE CONTROLLER BOARD

The PW6K1IC board operates as the central processing unit for access control decisions and data management within its assigned domain. Operation is primarily managed through the Honeywell ProWatch software.

4.1 Access Control Functions

- **Cardholder Database:** Stores and manages cardholder credentials locally for quick access validation.
- **Decision Making:** Processes access requests from readers based on programmed access levels and schedules.
- **Event Logging:** Records all access events, alarms, and system status changes for auditing and reporting.

4.2 Communication and Integration

The controller communicates with the ProWatch server via TCP/IP, synchronizing data and receiving configuration updates. It also interfaces with various hardware components such as readers, door strikes, and alarm sensors.

5. MAINTENANCE

Regular maintenance ensures the reliable operation of your PW6K1IC controller board.

5.1 Battery Replacement

The board contains a lithium battery (BR/CR-2325/2330 3V) for maintaining real-time clock and memory settings during power outages. This battery should be replaced periodically as part of routine maintenance.
WARNING: Replace Battery with Part no. BR/CR-2325, 2330 or 2335 only. Use of another battery may cause risk of fire or explosion. Refer to the owner's manual for safety instructions regarding battery replacement.

5.2 Cleaning

Periodically inspect the board for dust accumulation. Use a soft, dry brush or compressed air to gently clean the surface. Do not use liquid cleaners.

5.3 Firmware Updates

Ensure the controller's firmware is kept up-to-date. Firmware updates are typically performed through the ProWatch software and may include performance enhancements, bug fixes, or new features. Always follow Honeywell's official update procedures.

6. TROUBLESHOOTING

This section provides guidance for common issues encountered with the PW6K1IC controller board.

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
Controller not powering on.	No power supply; incorrect wiring; faulty power supply.	Verify power connections; check power supply output; ensure correct voltage.
No network communication.	Incorrect IP address; faulty Ethernet cable; network configuration issue.	Check IP settings; replace Ethernet cable; verify network connectivity to the server.
Readers not responding.	Incorrect reader wiring; faulty reader; controller port issue.	Check reader wiring (data, power); test with a known good reader; inspect controller reader ports.
Access denied for valid cardholders.	Incorrect access levels; time schedules; database synchronization issues.	Verify cardholder access levels and schedules in ProWatch software; force database synchronization.

For issues not covered here, or if troubleshooting steps do not resolve the problem, contact Honeywell technical support.

7. SPECIFICATIONS

Attribute	Detail
Model Number	PW6K1IC
Product Dimensions	9.05 x 5.5 x 0.9 inches
Item Weight	1 pound
Manufacturer	Honeywell
Compatible Devices	Personal Computer, Laptop, Printer, Monitor, Router (*Note: Refers to devices that can interface with the system, not direct connections to the board.*)
Operating System Compatibility	Windows, macOS, Linux (*Note: Refers to the operating system of the host computer running the ProWatch software.*)
Certifications	UL Listed, CE (as per board markings)

8. WARRANTY AND SUPPORT

8.1 Warranty Information

Honeywell products are typically covered by a limited warranty against defects in materials and workmanship. For specific warranty terms and conditions applicable to the PW6K1IC, please refer to the warranty documentation provided with your purchase or visit the official Honeywell Security website.

8.2 Technical Support

For technical assistance, installation support, or troubleshooting beyond the scope of this manual, please contact Honeywell Technical Support. Have your product model number (PW6K1IC) and any relevant system information ready when contacting support.

You can find contact information for Honeywell support on their official website:www.honeywell.com/us/en/security