

PLM-840 Electronic Lock Product Manual (with Harness)

1. Product Introduction

The PLM-840 electronic lock is designed to address intelligent management and control requirements for indoor/outdoor cabinets. It supports electronic key authorization, unlocking, and management functions, providing an efficient and intelligent solution. It significantly enhances transmission network security, operational efficiency, and effectively reduces user maintenance costs.

2. Product Features

2.1 Intelligent Management Functions

- **Electronic Key Management**
 - Supports electronic key authorization, real-time unlocking record queries, and platform-based control.
 - View unlocking locations, lock installation status, and historical operation records via the management platform.
- **Precision Authorization Mechanism**
 - Dynamically restricts key usage timeframes for fine-grained permission management.

2.2 Lock Body Structure & Performance

- **Materials & Processes**

Component	Material/Process
Lock Body	Zinc Alloy (High-Pressure Die Casting)
Accessories	Carbon Steel (Anti-Corrosion, Deformation-Resistant)
Lock Housing	Optional: Matte Paint/Black Paint/Powder-Coated Black
Metal Parts	Blue-White Galvanized Zinc (Salt Spray Test $\geq 24\text{h}$, Corrosion Resistance Grade 9)

- **Mechanical Performance**
 - Handle Maximum Pull Force: **250 N** (Anti-Tamper Design)
 - Handle Maximum Torque: **15 N·m** (Anti-Twist Structure)
 - Bolt Stroke: **25mm Triple-Point Locking** (Anti-Pry & Anti-Shim)
- **Environmental Protection**
 - IP Rating: **IP67** (Resists High-Pressure Water Jets and Dust Ingress)

3. Technical Parameters

3.1 Basic Parameters

Parameter	Conditions/Values
Operating Environment	Temperature: -20°C to +65°C ; Humidity: 5%~90%
Storage Environment	Temperature: -40°C to +85°C ; Humidity: 0%~90%
Altitude Range	-60m to 3000m
Electronic Components Warranty	2 Years (25°C/85% RH)
Mechanical Components Warranty	3 Years (25°C/85% RH)
Protection Rating	IP67 (Lock Body)/ IP54~IP65 (Control Unit)

3.2 Electronic Control Unit Parameters

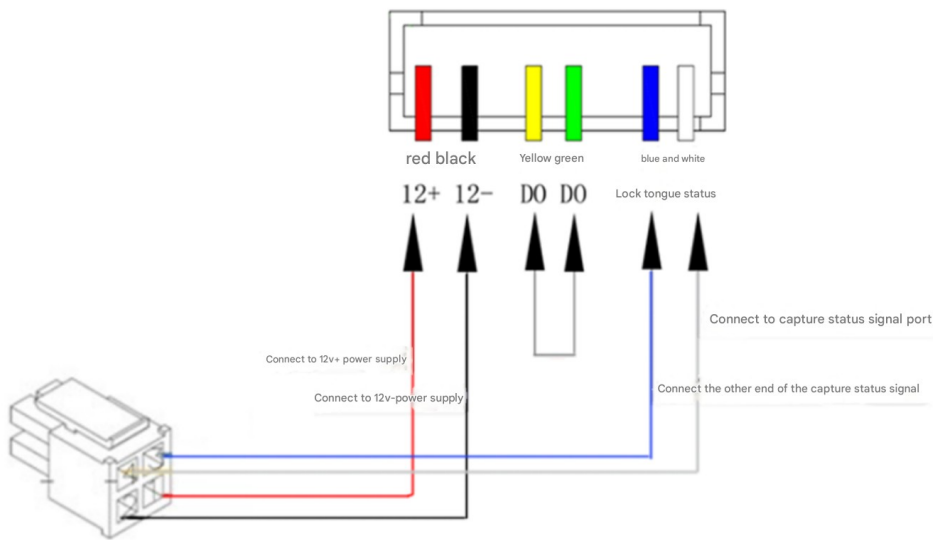
1. Electrical Parameters

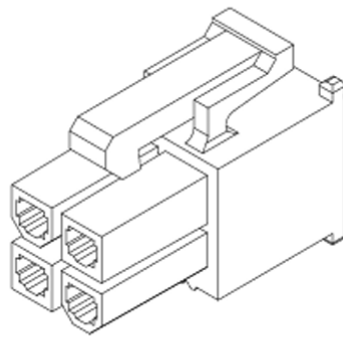
- Operating Voltage: **12V DC** (System & Sensors)
- Static Power Consumption: **0 W** (Non-Powered State)
- Dynamic Power Consumption: **2.4 W** (200 mA @ 12V)

2. Durability

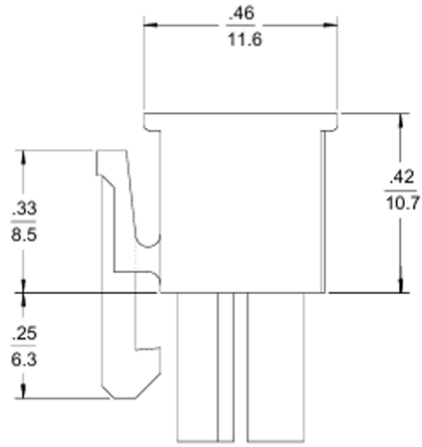
- Lock/Unlock Cycles: **50,000 Times**
- Torque: **≥46 N·m** (Bolt Drive)

4. Wiring Instructions





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4.1 Cable Connection Table

Wire Color	Function	Connection Instructions
Red	12V+	Connect to 12V Positive Power
Black	12V-	Connect to 12V Negative Power
Blue	Bolt Status Signal	Connect to Status Signal Input Port
White	Bolt Status Signal	Connect to Status Signal Output

4.2 Key Notes

- Harness Length: **600mm**
- Continuous Power Supply Duration: **≤10 Seconds** (Overload Protection)

5. Operation Guide

5.1 FSU Control Lock Operation

1. Unlocking

- After FSU sends command → Handle indicator lights up → Press handle to release → Rotate and pull to open.
- Sensor status is reported to FSU in real-time.

2. Locking

- Press handle to locked position → Upload handle and door sensor signals → Platform verifies lock status.

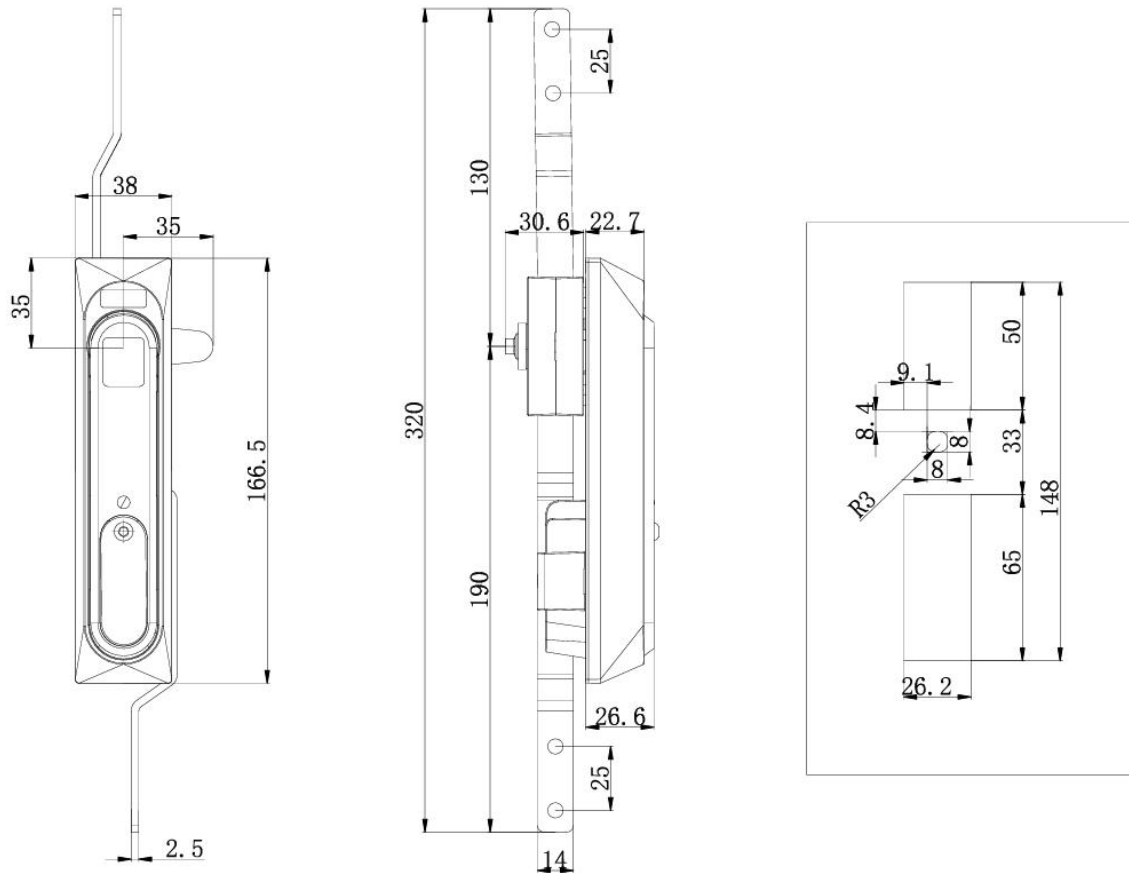
6. Product Specifications

- **Materials**
 - Base & Handle: **Zinc Alloy**
 - Bolt & Lock Core: **304 Stainless Steel**

- **Structural Design**

- **90° Rotating Handle** (Supports Left/Right Door Orientation Adjustment Without Structural Modifications)
- **Dual Control:** Electronic & Mechanical Lock Cores (Emergency Physical Unlocking Compatible)

7. Product Drawings



ALTOS METAL WORKS

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