

DCIM Controller | OM-DX700A



The OM-DX-700A Smart Room Host is a compact, industrial-grade ARM-based controller built for integrated cabinet monitoring, combining data acquisition, local control, and web visualization in one reliable unit. It supports up to 10,000 monitoring points via 8 serial ports, 16 DI, 8 DO, 8 AI, and expansion slots, all designed for simplified wiring with integrated port power. Featuring HDMI for local touch display, onboard 8GB storage (expandable via TF), and robust protection against surges and reverse connections, it ensures stable, long-term operation. With built-in alarm management, automated linkage control, and northbound interfaces like Modbus and SNMP, the OM-DX-700A delivers secure, scalable, and efficient monitoring for modern infrastructure.

Specification

System Specification

| | |
|------------------|---|
| Processor | ARM Cortex-A9 |
| Operating System | Linux |
| Memory | 1 GB |
| Internal Storage | 8 GB, expandable via TF card (up to 128 GB) |

Interfaces & Connectivity

| | |
|----------------|--|
| Ethernet | 4 x RJ45, 10/100 Mbps adaptive with 4KV surge protection |
| Serial Ports | 8 x RS485/232 switchable, 30V/100mA overvoltage protection |
| USB | 2 x USB 2.0 |
| HDMI | 1 x HDMI output for external display/touchscreen |
| Expansion Slot | 1 x expansion slot (supports up to 2 expansion boards) |
| TF Card Slot | 1 x TF slot, max 128 GB |

Inputs/Outputs

| | |
|---------------------------|--|
| DI (Digital Input) | 16 x dry contact, Phoenix terminal with DC 12V power output (every 4 groups), 4KV surge protection |
| AI (Analog Input) | 8 x 0-10V/0-20mA, Phoenix terminal with DC 12V power output (every 4 groups) |
| DO (Digital Output) | 4 x (2 dry contact + 2 wet contact), Phoenix terminal, DC12V/1000mA power supply |
| Battery Voltage Detection | 2 groups, measurement range 0~60VDC |

Power Supply

| | |
|-------------------|---|
| Power Input | 1 x AC 220V / DC 240V |
| Power Output | 2 x DC 12V, 1A each |
| Power Consumption | < 10W (excluding external power supply) |

Environmental & Protection

| | |
|------------------------------------|---|
| Surge Protection | 4KV/2KA (Ethernet, Serial, DI, DO) |
| Overvoltage/Overcurrent Protection | DI: 30V/50mA; Serial: 30V/100mA; DO: 30V/1.5A |
| Reverse Connection Protection | Supported |
| Operating Temperature | -40°C to 85°C |
| Storage Temperature | -40°C to 125°C |
| Operating Humidity | 5% ~ 95% (non-condensing) |

Mechanical

| | |
|--------------------|---|
| Dimensions (WxDxH) | 483 × 208 × 44.4 mm (±2 mm, excluding connectors) |
| Enclosure | 19-inch rackmount, 1U form factor |