

Smart Touch All-in One Controller | OM-DX900P



The OM-DX-900P Smart Touch All-in-One utilizes an ARM architecture, integrating data acquisition, storage, energy management, data upload, and local monitoring. Featuring industrial-grade hardware design, it operates reliably in environments ranging from -20°C to 60°C and has a service life of up to 10 years. It is suitable for environmental monitoring data collection scenarios such as energy storage cabinets, micro-modules, integrated cabinets, base stations, and small equipment rooms. The device comes with 8GB + 32GB of pre-configured storage to meet local storage requirements for historical data, alarm information, and logs. It supports connectivity for various industrial protocol devices, allowing mixed connections of equipment with different parameters on the same serial port to simplify wiring. An embedded WEB service enables remote monitoring and management via browser or APP.

Specification

System Specification

Processor	32-bit, 4-core, RK3288
Operating System	Ubuntu 18.04
Memory	2 GB
Storage	Total: 8 GB + 32 GB; Available: 32 GB

Network Interface

Ethernet	2 ports (1 x 1000M, 1 x 100M)
Transmission Distance	100 meters
Protection Method	GAS + PPTC + TVS
Surge Protection	2KV / 1KA

Serial Ports

Quantity	8 ports (6 x RS485, 2 x RS232)
Connector Type	Phoenix terminal
Communication Distance	RS485: 1200 meters; RS232: 15 meters
Protection Method	PPTC + TVS
Surge Protection	600W
Overvoltage/Overcurrent Protection	30V / 150mA

DI (Digital Input)

Quantity	12 ports (6 dry contact, 6 wet contact)
Connector Type	Phoenix terminal
Protection Method	PPTC + TVS
Surge Protection	600W
Overvoltage/Overcurrent Protection	30V / 150mA

DO (Digital Output)

Quantity	4 ports (2 x C-type relay, 2 x A-type relay)
Contact Capacity	30V / 3A
Connector Type	Phoenix terminal
Protection Method	PPTC + TVS
Surge Protection	600W
Overvoltage/Overcurrent Protection	30V / 3A

Power Supply

Power Input	1 port, 9-27V DC
Power Output	2 ports, DC 12V @ 1A each
Operating Current	0.9A @ 12V DC
Power Consumption	< 11W (excluding external power supply)
Protection Method	MOV + PPTC + TVS
Surge Protection	1500W
Overvoltage/Overcurrent Protection	30V / 3A

Display & Touch

Display Interface	EDP
Screen Size	10.1 inches
Resolution	1280 x 800
Touch Type	Capacitive

Mechanical Specifications

Dimensions (W×H×D)	285 × 46.7 × 189 mm (±1 mm)
Cutout Dimensions	270 × 40.7 × 158 mm (±1 mm)
Enclosure Material	Metal
Mounting Type	Embedded

Operating Environment

Operating Temperature	-20°C to 60°C
Operating Humidity	5% ~ 95% RH (non-condensing)

Other Interfaces

Debug Port	1 x Type-C (for debug log output)
USB	Standard USB 2.0 (for external U-disk, USB NIC, mouse, etc.)
TF Card Slot	1 x slot, supports up to 64GB (32GB TF card included by default)

