

Monitoring and Management Gateway | OM-DT100A-HC1



The OM-DT100A-HC1 is an all-in-one central monitoring gateway designed for small to medium server rooms, cabinets, and micro modules data center. It features 1 WAN, 4 LAN, 8 RS485, 2 RS232, 4 DI, 4 DO, WiFi, 4G (reserved), USB, and HDMI interfaces, supporting over 100,000 measurement points via serial or TCP. Built on industrial-grade ARM architecture with 10-year lifespan, it offers 16GB storage expandable up to 1TB via SATA/SSD/TF. The gateway supports Modbus TCP, SNMP, and MQTT for platform integration, Web-based remote configuration, customizable SMS/email alerts, and automated linkage control. All ports feature overvoltage, surge, and reverse connection protection for reliable operation.

Specifications

System Specifications

Processor	64-bit, 4+2 cores, RK3399
Operating System	Embedded Linux
Memory	4 GB
Storage	Core: 16 GB eMMC; Expansion: SATA/SSD support up to 1 TB HDD

4G (Optional)

Network Standards	Mobile/Unicom/Telecom 4G
Antenna Standard	SMA female LTE FDD: B1/B3/B5/B8; LTE TDD: B38/B39/B40/B41; TD-SCDMA: B34/B39; WCDMA: B1/B8; CDMA: BC0; GSM: 900/1800MHz
Frequency Bands	900/1800MHz
Transmission Rate	LTE CAT1

External Interfaces

Display Interface	1 x HDMI for external display
TF Card Slot	1 x TF slot, supports up to 128 GB
USB Interface	2 x USB 2.0 (for SMS module, USB touch screen, USB writer, U-disk, etc.)
Type-C Interface	1 x Type-C (debug port)

DI Input

Connector Type	4 x DI (dry contact)
Surge Protection	2KV / 1KA
Protection Method	GAS + PPTC + TVS
Overvoltage/Overcurrent Protection	30V / 50mA

Network Ports

Connector Type	5 x RJ45 (T568B) 1 x WAN port, 4 x LAN ports (with switch function)
Function	
Transmission Distance	100 meters
Speed	WAN: 10/100/1000M adaptive; LAN: 10/100M adaptive
Surge Protection	2KV / 1KA
Protection Method	GAS + PPTC + TVS

DO Output

Connector Type	4 x DO: DO-1/2 C-type relay (dry contact output); DO-3/4 DC12V output (DC12V/800mA supply capacity)
Protection Method	PPTC
Contact Capacity	30V / 1.35A
Overvoltage/Overcurrent Protection	30V / 1.35A

Serial Ports

Quantity	8 x RS485; 2 x RS232 (shared with COM7/8 RS485)
Baud Rate	1200 ~ 115200 bps
Connector Type	RS485: RJ45 (with DC12V/500mA power output); RS232: Phoenix terminal (3-wire)
Overvoltage/Overcurrent Protection	RS485: 5V/50mA; RS232: 30V/100mA
Transmission Distance	RS485: 1200 meters; RS232: 15 meters
Surge Protection	2KV / 1KA
Protection Method	GAS + PPTC + TVS

Power Supply

Power Input	2 groups, AC 220V / DC 240V
Power Output	DC12V/3A, 2 voltage outputs
Power Consumption	< 10W (excluding external power supply)
Connector Type	Phoenix terminal (input/output)
Protection Method	ZOV + PPTC + TVS
Surge Protection	2KV / 1KA

Wi-Fi

Wireless Standard	802.11b/g/n
Network Mode	2.4G Wi-Fi connection
Networking Mode	AP/STA
Antenna Interface	Standard SMA female, 50Ω impedance

Operating Environment

Operating Temperature	-40°C to 85°C
Operating Humidity	5% ~ 95% RH (non-condensing)

Physical Specifications

Mounting Method	1U rack mount
Dimensions (W×D×H)	482.4 × 280.3 × 43.9 mm (±2 mm, excluding Phoenix terminals and other connectors)

