

Non-Positioning Water Immersion Controller | OM-LDA-DB601



This single-channel leak controller supports up to 1000 meters of detection cable with software-selectable sensitivity and break detection. It features an RS485 Modbus RTU interface for remote monitoring and a configurable relay output for alarms or automated controls. A built-in buzzer with one-key silence and LED status indicator provide clear local alerts. Industrial-grade design ensures reliable operation from -40°C to 85°C with wide voltage input (9-27V DC) and comprehensive port protection for a 10-year lifespan. Ideal for data centers, warehouses, museums, and other critical environments requiring dependable leak detection.

Specifications

Water Detection Interface

Detection Channels	1 channel
Connector Type	Phoenix terminal
Detection Distance	Up to 1000 meters
Sensitivity Levels	4 levels adjustable
Protection Method	TVS
ESD Protection	4KV

Digital Output

DO Channels	1
Connector Type	Phoenix terminal
DO Output Type	Type A or Type B relay, configurable via internal jumper
Contact Capacity	30V / 3A
Protection Method	PPTC + TVS
Surge Protection	600W
Overvoltage/Overcurrent Protection	30V / 3A

Upstream Serial Interface

Connector Type	Phoenix terminal
Port Quantity	1
Interface Type	RS485
Communication Protocol	Standard Modbus RTU
Protection Method	PPTC + TVS
Surge Protection	600W
Overvoltage/Overcurrent Protection	30V / 200mA

Power Supply

Connector Type	Phoenix terminal
Input Voltage	9 ~ 27V DC

EMC Protection

ESD	GB/T 17626.2-2018, Level 2, Contact 4KV, Air 4KV
Surge	GB/T 17626.5-2019, Level 2, Differential mode 0.5KV
EFT	GB/T 17626.4-2018, Level 2, Power line 1KV, Signal line 0.5KV
Radiation	GB/T 17626.3-2016, Level 2

Sensitivity Settings

Adjustment Method	3-bit DIP switch
Levels	4 levels

Operating Environment

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

Mechanical Specifications

Mounting Method	DIN rail mounting
Dimensions (W×D×H)	91.3 × 58.8 × 36.6 mm (excluding terminals)