# DIO-52 DI/DO Module

## Improves Process Efficiency

DIO-52 is a DI/DO module that integrates wired devices into wireless networks to create automated responses and enhances security and convenience. With a digital input (DI) and a digital output (DO) connecting to wired devices, DIO-52 serves as a bridge of reliability and fast communication between a security system and wired devices.

DIO-52 turns the device connected to its DI point into the trigger of events, and its DO point into the responder of events. Open it, close it, turn it on, turn it off, wirelessly remotely activate or obtain data from devices that are hard to reach. Devices commonly connected are smoke detectors, PIR motion sensors, door/window contacts, garage doors, motorized shades, gates, or valves.
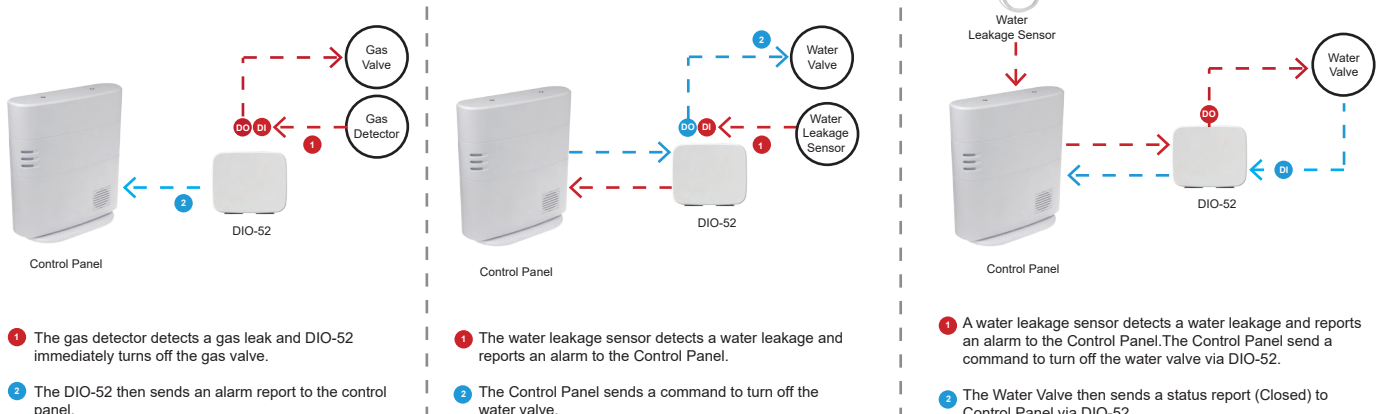
DIO-52 can be flexibly incorporated into new or existing smart home security systems, further improving process efficiency and safety for the entire home.

• **One Digital Input (DI) and one Digital Output (DO)**

• **Battery-powered, AC-powered, or DC-powered**

## *Features*

- One Digital Input (DI) and one Digital Output (DO)

- Dry contact input forms Normal Open (NO) or Normal Close (NC) loop

- Turns the device connected to the DI into the trigger of events

- Turns the device connected to the DO into the responder of events.

- Obtains data from and activates remote field devices that are wired or hard to reach

- Establishes reliable and fast communication between a control system and remote field devices

- LED status indicator

- CE compliance

### Examples of DI/DO Architecture



Gas Valve
Gas Detector
DO DI
1
2
DIO-52
Control Panel

1. The gas detector detects a gas leak and DIO-52 immediately turns off the gas valve.

2. The DIO-52 then sends an alarm report to the control panel.

Water Valve
2
Water Leakage Sensor
DO DI
1
DIO-52
Control Panel

1. The water leakage sensor detects a water leakage and reports an alarm to the Control Panel.

2. The Control Panel sends a command to turn off the water valve.

Water Leakage Sensor
Water Valve
DO
DI
DIO-52
Control Panel

1. A water leakage sensor detects a water leakage and reports an alarm to the Control Panel.The Control Panel send a command to turn off the water valve via DIO-52.

2. The Water Valve then sends a status report (Closed) to Control Panel via DIO-52.

## Specifications

**DIO-52-B-F1**

| | |
|---|---|
| Frequency | 868 MHz / 433 MHz |
| Power Source | DC 5-12V |
| Backup Battery | CR123 battery x 3 / AA L91 battery x 2 |
| Backup Battery Life | 4.7 years* (CR123); 3.5 years* (L91) |
| Input Point (DI) | 1 point |
| Output Point (DO) | 1 point; Max load: 2A/30VDC or 0.5A/125VAC |
| Operating Temperature | -10°C to 45°C (14°F to 113°F) |
| Operating Humidity | Up to 85% non-condensing |
| Dimensions | 111mm x 91mm x 29mm |

*\* Note: Actual battery life may vary with product settings, operating environment, and usage patterns.*