SYSG5002
Leak Detection Positioning Module
Product Information

➢ Leak detection positioning module.
➢ Detection cable up to 1500m can be connected.
➢ LCD screen showing the device status and transmitting the leak alarm.
➢ Remote alarm and control via Modbus communication protocol.

Easy Installation and Operation

■ The SYSG5002 sensing module can detect the leakage of water, acid-base, oil and other liquids, and connect the sensing cable up to 1500 meters. When a liquid leak is detected, the leak location is displayed via the LCD screen and the relay alarm signal is issued.

■ The SYSG5002 module can be used not only as a separate detection and alarm unit, but also with other SYSG5002 modules. The module can communicate with other monitoring system or upper computer through standard communication protocol to realize remote alarm and remote equipment control.

■ The SYSG5002 module can be configured with a Microsoft Windows-based PC. Module comes with standalone configuration software.

Multi-Purpose Design

■ The output of the alarm relay can choose multiple connection modes, and normal power on or normal power off working modes, LED indicates power supply, leakage, wiring fault and communication status; The LCD shows the location of the leak.

■ There are three power supply models: 12-24 VDC, 24 VAC, and 220 VAC.

■ Can be serial RS-485 communication, centralized monitoring network up to 1200 meters.

■ he detection module has a special address assigned by the software and does not need to use the rotary switch.

■ DIN35mm convenient rail mounting.

Technical Details

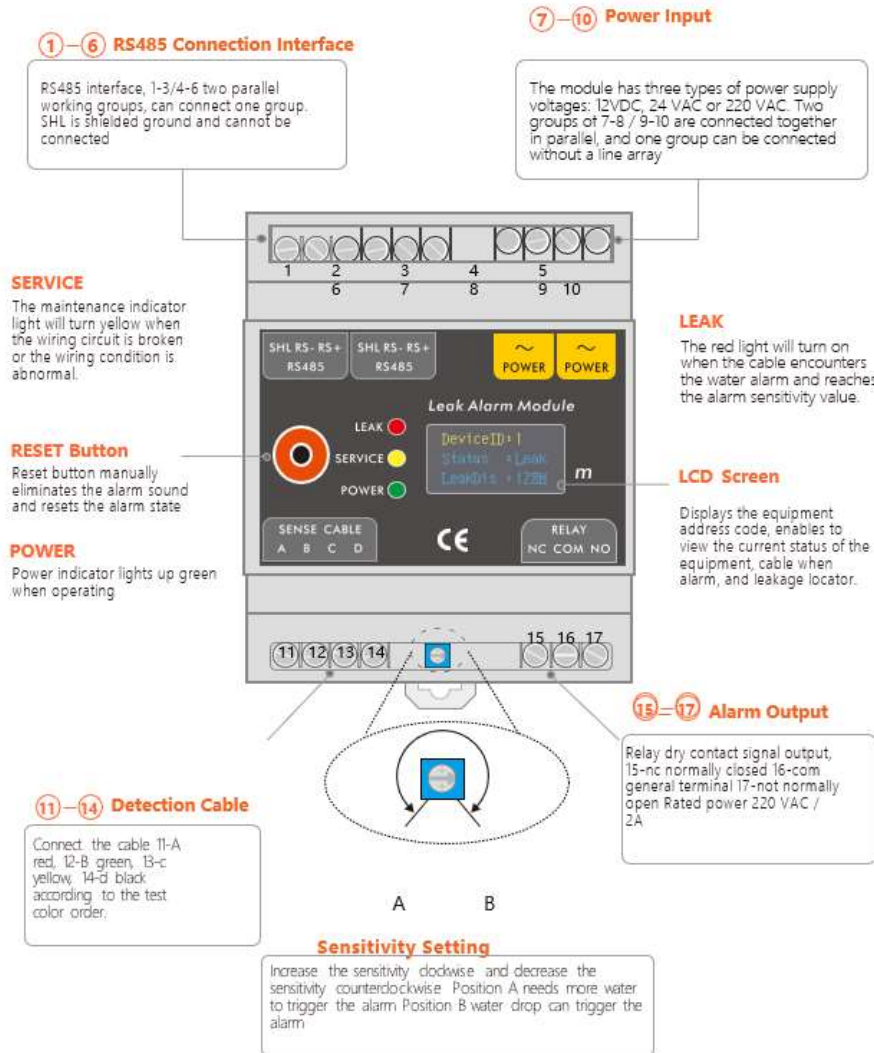|	
Detection Cable	Compatible with SYSG5003 and other SYSG water cables
Detection Cable Length	Maximum cable length is 1500m.
Plastic Body	White fireproof ABS, IP55 waterproof grade, weight 200g, size 70x86x58mm
Detection Sensitivity	0-50K stepless adjustment, sensitivity selection and wide detection range
Sensitivity	Detection error is less than 2% of cable length
Power Supply	12-24 VDC or 24 VAC or 220 VAC AC, operating current less than 1A
Relay Output	1spdt, rated power 220VAC / 2A (normally open and normally closed)
RS485 Output	RS485 serial interface (dual line network), MODBUS-RTU communication

Sertifikalar

The SYSG5002 test module is CE and CAS approved for use in non-hazardous areas.

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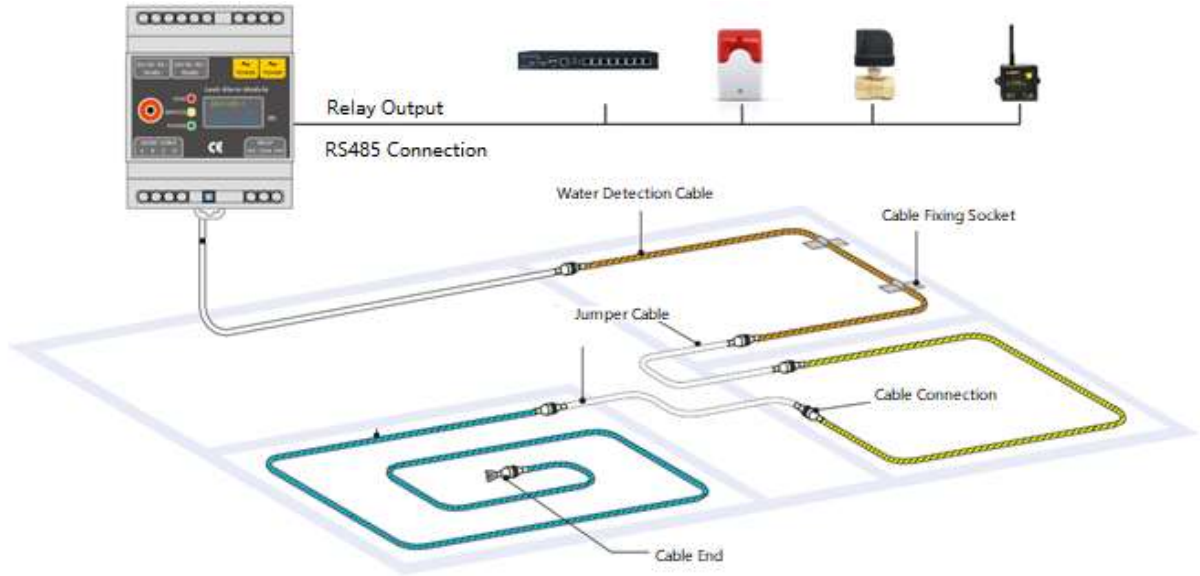E: info@exagate.com

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Caution:

** Please carefully confirm the power supply voltage before turning on the power and make sure the power cord is connected to the correct port, otherwise it may cause malfunction of the sensing module.
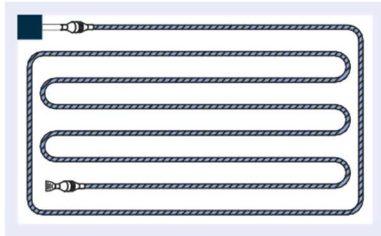

① — ⑥ RS485 Connection Interface

RS485 interface, 1-3/4-6 two parallel working groups, can connect one group. SHL is shielded ground and cannot be connected

⑦ — ⑩ Power Input

The module has three types of power supply voltages: 12VDC, 24 VAC or 220 VAC. Two groups of 7-8 / 9-10 are connected together in parallel, and one group can be connected without a line array

SERVICE

The maintenance indicator light will turn yellow when the wiring circuit is broken or the wiring condition is abnormal.

RESET Button

Reset button manually eliminates the alarm sound and resets the alarm state

POWER

Power indicator lights up green when operating

LEAK

The red light will turn on when the cable encounters the water alarm and reaches the alarm sensitivity value.

LCD Screen

Displays the equipment address code, enables to view the current status of the equipment, cable when alarm, and leakage locator.

⑮ — ⑰ Alarm Output

Relay dry contact signal output, 15-nc normally closed 16-com general terminal 17-not normally open Rated power 220 VAC / 2A

⑪ — ⑭ Detection Cable

Connect the cable 11-A red, 12-B green, 13-c yellow, 14-d black according to the test color order.

Sensitivity Setting

Increase the sensitivity clockwise and decrease the sensitivity counterclockwise. Position A needs more water to trigger the alarm. Position B water drop can trigger the alarm

 1) The maximum length of the connection test cable of the sensing module is 1500 meters (excluding outgoing and jumper cables).
2) The leakage alarm display position is calculated according to the starting order of the detection cable, that is, the length of the detection module is calculated in the direction of the cable end.
3) The factory setting of the detection sensitivity is normal, and the equipment address is 01 by default.
4) The sensing module has a waterproof design. Please select the waterproof installation box for the special environment.
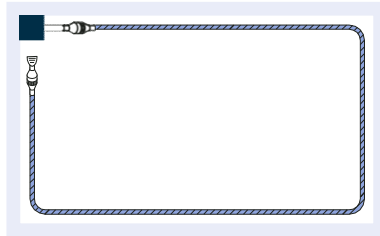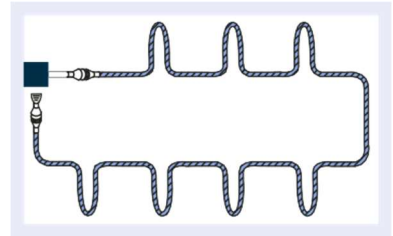
System Diagram

Sensing Cable Layout

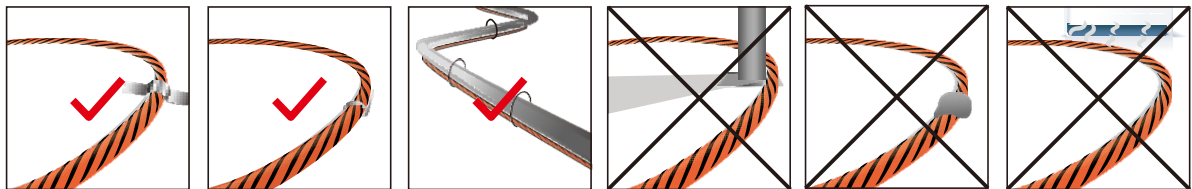Covering the Entire Area   Edge Covering Area   Covering air-conditioned areas

Sensing Cable Installation

Do not use tools such as glue or plastic for cable fixing, do not lay the cable in front of the ventilation unit. The location of the detection cable should be away from high temperature fire, strong magnetic field environment, wet and dusty environment, be careful not to scratch the cable sheath by all kinds of sharp objects.

Liquid Detection Module; It is suitable for leak detection of conductive liquids such as water, acids, alkalis and oils.

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Summary

The communication protocol of the device adopts the standard MODBUS-RTU protocol, the standard asynchronous serial two-wire RS485 communication port, and the time interval of reading the data of the device by the upper computer is not less than 500ms, the recommended value is 1s. The default address of Detection Module is 01, which can be changed by PC instruction. N (parity check), 8 (data bit), 1 (stop bit)

Communication Parameters

Data Transfer Rate:	Communication Speed 9600 BPS
Data Transfer Format:	N (parite check), 8 (data biti), 1 (stop bit)
Device Default Address	01
RS485 Port:	Standard two-wire asynchronous communication, 8 RS+, 9RS-

PRODUCT SKU	BARCODE	P/N	DESCRIPTION
SYSG5002	8699931601350	7270SE92011	Leak Detection Positioning Module

LIMITED PRODUCT WARRANTY

All ExaGate products are covered with 2 years limited guarantee from the date of original purchase. (Warranty duration may change depending on your country) Your sales or delivery receipt, showing the date of purchase of product is your proof of purchase. ExaGate is obliged to repair or replace the defective hardware (or any part of it's) with no charge to owner.

Conditions Void of Warranty

- Damages on unit, cable or screen.
- Defections due to electrical wiring and/or city network.
- Interference to unit by non-authorized staff.
- Any problems caused by act of nature.
- Misusage of unit stated by the user manual.
- Removal or destruction of serial number, warranty labels.
- Any kind of modifications on unit.