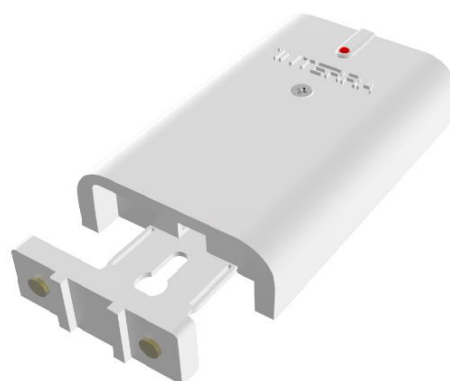


INTERRA

Developer of Uniqueness

KNX Water Flood Detector

Product Manual



Contents

1. Content of The Document	4
2. Product Description	5
2.1. Technical Information.....	6
3. Detailed Specification of The Functions.....	7
3.1.General	7
3.1.1.Parameters List.....	7
4. ETS Objects List & Descriptions	9
4.1. General Objects	10

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TS EN ISO 9001:2008

1. Content of The Document

This document contains the specifications of Interra's ITR401-0001 KNX Water Flood Detector product and the project context. This document applies to all products involved as a common information base and is binding on KNX system equipment involved in the project. Changes are permitted only in coordination with the product management.

2. Product Description

Leaks can cause serious damage to your home. ITR401-0001 is a water flood detector equipped with KNX system. ITR401-0001 is an early warning system that notifies you through KNX bus. By catching it early, you may be able to avoid expensive repairs and loss of treasured items. Due to the existence of the KNX system, users have a chance to arrange any kind of additional alert system.

The detector can be placed near trouble spots like the sump pump, water heater, washer and under sinks. Each can be individually named and registered in the main control panel. The detector works based on the theory of liquid conductivity. The performance is reliable and the installation is easy. The detector can be placed near trouble spots like the sump pump, water heater, washer, under sinks or any desired location such as computer rooms, warehouses, water tanks mainly any hidden areas where water can leak without notice. When the water-based liquids reach to probes of detector, it will send telegrams to the KNX bus.

2.1. Technical Information

Product Code	ITR401-0001
Power supply	KNX power supply
Power consumption	10 mA (Alarm condition)
LED indicators	1 x Alarm (red) / Operating (green) LED 1 x Programming LED
Buttons	1 x Programming button
Output current	0,5 A @125 V DC 1 A @24 V DC
Connection cable	0,25 mm ² – 1,5 mm ²
Type of protection	IP 20
Temperature range	Operation (-40°C...70°C)
Maximum air humidity	<90 RH
Flammability	Non-flammable product
Colour	Light Grey
Dimensions	55x88,1x21,6 mm (WxHxD)
Configuration	Via ETS Software

3. Detailed Specification of The Functions

The most outstanding features of ITR401-0001 are:

- Module alive beacon notification.
- Device is eligible to alert the users via buzzer, LED or relay output. Users can activate the LED or buzzer via ETS parameters
- The LED is available for two colour statuses which operated inversely as green and red.
- Alarm detection delay selections are available. Users can determine the delay via ETS parameters.
- Device has a sensing probe that extends downward up to 25cm. The sensing probe operates determined alarm conditions when water presence is detected.
- Suspending the alarm for desired duration feature is available.
- Alarm reset feature is available.

3.1. General

3.1.1. Parameters List

PARAMETER	DESCRIPTION	VALUES
Module Alive Beacon	This parameter allows sending the value “true” periodically while the module is running.	Disabled Enabled
Module Alive Beacon Interval (sec)*1	This parameter determines the Module Alive Beacon sending period.	3600 (1...65535)
Water Alarm Polarity	This parameter allows determining telegram polarity of the water alarm.	1:Alarm; 0: No alarm / 1: No Alarm; 0: Alarm
Send water alarm delay (sec)	A delay time for the water alarm can be assigned via this object.	3 (1-255)
Send water alarm periodically	Alarms can be sent periodically at the intervals specified in this parameter.	Disabled, 5s, 10s, 30s, 1min, 5min, 10min, 20min, 30min, 40min, 50min, 1h, 2h, 3h, 4h, 5h, 6h, 12h, 24h
Status Led	Status LED indicates device is energized or not. The led can be arranged as always on or always off via this parameter.	Always on Always off
Alarm Led	This parameter is used for the behaviour of water alarm led.	Only alarm Always off

Alarm led blink*²	If the alarm LED is arranged as Only alarm, this parameter allows the alarm LED to make blink.	Disabled Enabled
Alarm led blink duration (sec) *²	Alarm LED blink duration can be determined via this object.	500 (300-3000) msec
Buzzer	This parameter determines whether buzzer will be used on alarm condition or not.	Enabled Disabled
Buzzer duration*³	If buzzer is arranged to be used on alarm condition, duration of buzzer can be determined via this parameter.	5min (5min, 10min, 20min, 30min, 40min, 50min, 1h, 2h, 3h, 4h, 5h, 6h, 12h, 24h)
Alarm reset	The alarm reset parameter is used to end the alarm condition of the device. Disabled: Determined alarm conditions start when the device detects water presence. As soon as probes get dry alarm conditions to end. Enabled: When the device detects water presence, alarm conditions start. Even if probes get dry, alarm conditions do not end until device is reset.	Disabled Enabled
Alarm reset polarity*⁴	Alarm reset polarity is determined via this parameter.	1:Reset / 0:Nothing 1:Nothing / 0:Reset
Device suspend	This parameter is used to mute the device on alarm conditions for a certain period of time.	Disabled Suspend on value 0 Suspend on value 1
Duration of suspend (min) *⁵	Suspend duration is determined via this parameter.	1h (Infinity, 30min, 40min, 50min, 1h, 2h, 3h, 4h, 5h, 6h, 12h, 24h)
Test sensor	This parameter is used for testing the sensor without water presence.	Disabled Enabled

*¹ This parameter is only visible when the parameter “Module Alive Beacon” is set to “Enabled”.

*² This parameter is only visible when the parameter “Alarm led blink” is set to “Enabled”.

*³ This parameter is only visible when the parameter “Buzzer” is set to “Enabled”.

*⁴ This parameter is only visible when the parameter “Alarm reset” is set to “Enabled”.

*⁵ This parameter is only visible when the parameter “Device Suspend” is set to “Suspend on value 0” or “Suspend on value 1”.

4. ETS Objects List & Descriptions

The KNX Water Flood Detector can communicate via the KNX bus line. In this section, the group objects of the KNX Water Flood Detector is described. Which of these group objects are visible and capable of being linked with group addresses are explained in sub-sections.

No	Name	Function	DTP Type	Length	Flags				
					C	R	W	T	U
0	General	Alive Beacon	1.002	1 bit	X	X		X	X
1	General	Water Alarm	1.005	1 bit	X	X		X	X
2	General	Alarm Reset	1.002	1 bit	X	X	X	X	X
3	General	Device Suspend	1.003	1 bit	X	X		X	
4	General	Sensor State	1.003	1 bit	X	X		X	X
5	General	Test Sensor	1.003	1 bit	X	X	X	X	X

4.1. General Objects

This section describes the "general" group objects and their properties. General group objects, as the name suggests, indicate the general characteristics of the KNX Water Flood Detector

Object Number	Object Name	Function	Type	Flags
0	General	Alive Beacon	1 bit	CWU

This object is only visible when the "Module Alive Beacon" function is enabled. Via the group address linked, the value "true" is sent while the module is running.

DPT: 1.002 (boolean)

1	General	Water Alarm	1 bit	CRTU
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This object indicates water on the sensor.

DPT: 1.005 (alarm)

2	General	Alarm Reset	1 bit	CRWTU
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Used to reset the water alarm object.

DPT: 1.002 (boolean)

3	General	Device Suspend	1 bit	CRWTU
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This object mutes the device.

DPT: 1.003 (enable)

4	General	Sensor State	1 bit	CRTU
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Sensor status information indication object.

DPT: 1.003 (enable)

5	General	Test Sensor	1 bit	CRWTU
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This object is used to test the sensor whether working or not.

DPT: 1.003 (enable)

CONTACT INFORMATION

THE INTERRA WEBSITE

Interra provides documentation support via our website www.interratechnology.com. This website is used as a means to make files and information easily available to customers. Accessible by using your favourite Internet browser, the website contains the following information:

- Information about our products and projects.
- Overview of Interra company and values.
- Product Support: Datasheets, product manuals, application descriptions, latest software releases, ETS databases and archived software.

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