



# iTrapSensor® REPEATER MODEL iT5-IS-RUN

## REPEATER FOR ITRAPSENSOR MONITORING SYSTEM BASED ON ISA 100.11A

### Features

**Repeater for iTrapSensor wireless monitoring sensors. Relays data between monitoring sensors and access point and extends communication distance.**

1. Enables high frequency monitoring: communication cycles configurable between 1 second and 1 hour.
2. Line-of-sight communication distance of 400 m between repeater and sensors or other repeaters.
3. Powered by a long-life battery pack (replaceable in hazardous locations).
4. Intrinsically safe construction for use in hazardous and non-hazardous locations.
5. Optional extended antenna type for remote antenna mounting.



### Specifications

Model	iT5-IS-RUN	
Type	Battery-powered	
Wireless Frequency Band	2.4 GHz	
Maximum No. of Hops	4 (from access point to sensor)	
Communication Cycle <sup>1)</sup>	1 second to 1 hour	
Power Source	Non-rechargeable lithium-thionyl chloride battery pack <sup>2)</sup> × 2 Rated voltage: 3.6 V Rated capacity: 76 Ah per pack	
Battery Life <sup>3)</sup>	10 years for regular operation (5 TLV sensors with 60 s measurement cycle), or 5 years (20 TLV sensors with 60 s measurement cycle)	
Intrinsic Safety Specifications	ATEX:  II 1G Ex ia IIC T4 Ga      UL/cUL: Class I, Division 1, Groups ABCD IECEX: Ex ia IIC T4 Ga      Class I, Zone 0, AEx ia op is IIC T4, Ex ia op is IIC T4 UKEX: Ex ia IIC T4 Ga	
Ambient Temperature (°C)	-40 to + 80	
Wireless Module	Communication Protocol	ISA 100.11a, based on IEEE 802.15.4
	Regulatory Compliance	FCC, IC, CE compliant
	Frequency Bandwidth	2.405 to 2.480 GHz
	Transmitter Power Output	7.0 mW/MHz
Protection Class	Approx. 400 m <sup>4)</sup> (with a clear line of sight)	
Material	Body, Cover	Aluminium Alloy Die Castings (ADC3, SG100A)
Accessory	Mounting bracket	
Option	Antenna extension: 150 mm antenna with 3 m or 13 m cable (intrinsically safe)	

<sup>1)</sup> Automatically set according to the sensor communication cycle settings.

<sup>2)</sup> Battery pack can be replaced in hazardous locations.

<sup>3)</sup> Battery life is given for an ambient temperature of 25 °C with 1 repeater and may vary depending on environmental conditions such as gateway used, transmission status and ambient temperature. Battery life may decrease more quickly as the number of relaying repeaters increases.

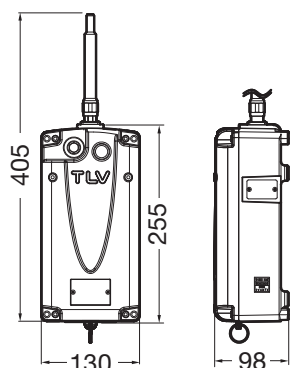
<sup>4)</sup> Depends on environmental conditions and installation location.



To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

## Dimensions

### ● iT5-IS-RUN

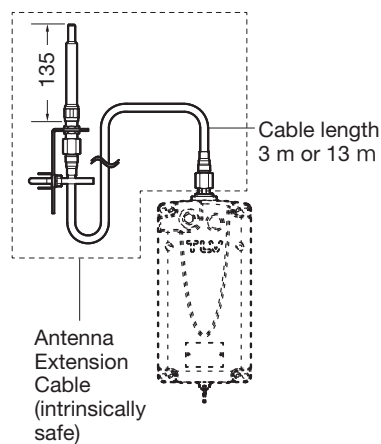


Units: mm

Approx. Weight (kg): 3.0 (incl. battery pack)

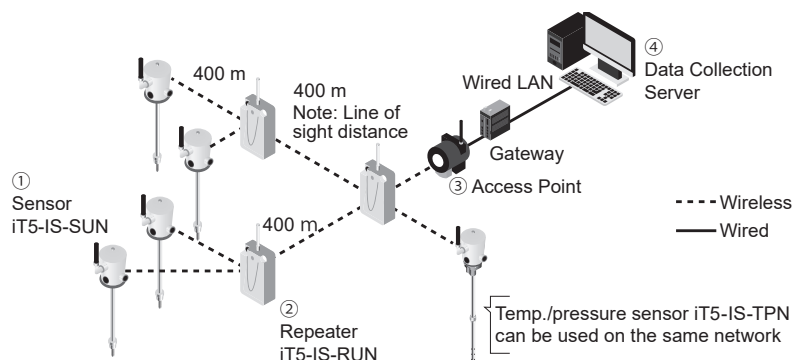
## Option

### Antenna Extension



Units: mm

## System Configuration Example



No.	Model	Function
①	Sensor: iT5-IS-SUN	Measurement of ultrasound and surface temperature, wireless transmission of information
②	Repeater: iT5-IS-RUN	Wireless relay of information
③	Access Point/Gateway	Relay of information via intranet
④	Data Collection Server	Importing collected data

Refer to individual specification data sheets (SDS) for full details.