

## SMARTPILOT WIRE



The **SMARTPILOT WIRE** is a Class C LoRaWAN® actuator that monitors and controls up to 6 operating modes for any electric heater as well as any active load (ON/OFF) driven by a relay.

### APPLICATIONS

- Smart Building – Electric heater and water heater remote management .
- Demand side management – Active load control (ON/OFF) of any device driven by a relay.
- Smart Lighting – Switch ON/OFF street lights.
- HVAC & building management – Monitor and control valves, pumps, fans, heaters/coolers, lights...

### BENEFITS & KEY FEATURES

- LoRaWAN®, Class C
- Easy to use and deploy
- Active load monitoring and control
- Data compression for batch status report
- Class II protection

### QUALITY & RELIABILITY

- RED, RoHS



The Class C LoRaWAN® **SMARTPILOT WIRE** from WATTECO is a long range, high performance and high quality wireless actuator with two specific operating modes:

- Smart pilot wire actuator to monitor and control electric heaters.
- Switched relay to monitor and control any device connected to the relay (street lights, residential lights, pumps, fans, valves, motors, generators, ...).

When operating as a **SMARTPILOT WIRE**, the actuator controls up to 6 heating modes:

- Comfort: track, monitor and report the temperature set point of the heater.
- Eco: temperature set and track 4°C below the temperature set point of the heater.
- Anti-freeze: maintain room temperature at +5°C.
- Stop: no heating.
- Comfort -1: Temperature set and track 1°C below the temperature set point of the heater.
- Comfort -2: Temperature set and track 2°C below the temperature set point of the heater.

The **SMARTPILOT WIRE** status can be locally stored, concatenated and compressed. This unique batch mechanism significantly reduces the amount of data transmitted when reporting the status history of the **SMARTPILOT WIRE** output.

### THE LARGEST IOT PRODUCTS RANGE FOR YOUR PROJECT

WATTECO is a European leader in the design and manufacture of smart IoT devices to suit all remote reading and data collection solutions.

WATTECO is a LoRa Alliance® member.

## TECHNICAL DATA

RADIOFREQUENCY	Frequency (MHz)	Transmit Power (dBm)	Receiver Sensitivity (dBm)
	EU: 863-870	+14	-140

### FIRMWARE

Protocol	LoRaWAN®, Class A.
Activation method	Activation by Personalization (ABP) or Over-The-Air Activation (OTAA)
Data encryption	AES128
Application layer	ZCL (ZigBee Cluster Library) – to be interpreted by the remote server
Measurements & Transmission cycles	Configurable from 10 minutes to 24 hours
Data compression	Yes (differential coding)

### ELECTRIC HEATER APPLICATION

Comfort	Track the temperature set point of the heater
Eco	Temperature set and track 4°C below the temperature set point of the heater
AntiFreeze	Maintain room temperature at +5°C
Stop	No heating
Comfort -1°C	Temperature set and track 1°C below the temperature set point of the heater
Comfort -2°C	Temperature set and track 2°C below the temperature set point of the heater

### SWITCHED RELAY CONTROL

Switch ON / OFF	
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### POWER SUPPLY

Power supply (V <sub>AC</sub> )	230V / 50Hz
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### USER INTERFACES

LED indicator	3 LEDs for configuration and network pairing
Magnetic switch	Reset, ON/OFF

ENCLOSURE	Size (mm)	IP rating
	76 x 41 x 17	IP30

ENVIRONMENT	Operating temperature	Storage conditions
	-20°C to +50°C	+10°C to +30°C +20%rH to +60%rH

### DIRECTIVES & STANDARD

Radio Equipment Directive 2014/53/EU, RoHS	  
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## PRODUCT NUMBER

REFERENCE	DESCRIPTION
50-70-027	LoRAWAN® SMARTPILOT WIRE SENSOR