Wireless Sensor Adapter (WSA10)

Daintree Wireless Solution

The **Wireless Sensor Adapter (WSA10)** is part of the Daintree product portfolio, an open networked wireless controls solution for lighting and building control, monitoring, and optimization. Daintree controls provide a highly scalable solution to address evolving environmental regulations and transform spaces into intelligent environments for buildings of all sizes.

Consisting of three components, Daintree includes sensors and controls at the edge, an open API cloud platform, and software apps to help facility managers make decisions based on how space and assets are actually being used using a data-rich sensor network. Benefits of adding wireless Daintree controls include:
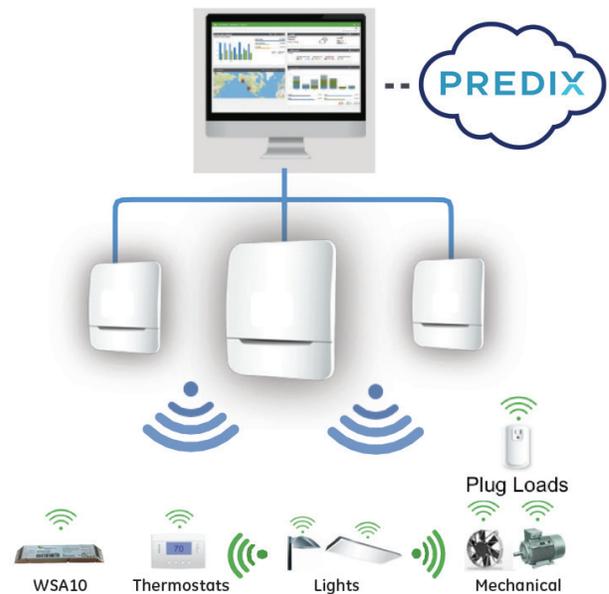
- Up to 50% Energy savings across lighting, HVAC, plugload, fans and more
- Visibility into energy usage, trends and insights to optimize operations

- Automated demand response, superior comfort and lower maintenance expense
- Regulatory compliance with Title 24; 2005 EnergyPolicy Act; 2007 Energy Independence and Security Act; 2009 DOE Regulations

Daintree Wireless Solutions Product Overview

The WSA10 is a control component within Daintree – the industry's leading wireless controls solution for smart buildings, delivering dramatic energy savings and operational efficiency improvements in a simpler, more cost-effective way than ever before. The WSA10 enables open, standards based ZigBee wireless control communications with a variety of sensor devices used in HVAC systems.

The WSA10 provides up to four (4) thermistor temperature sensor inputs, and up to two (2) 0-10V analog inputs suitable for a broad range of transducers, enabling wireless control and management of wired end-devices within the ControlScope system.

- Cost-effective wireless sensor monitoring throughout the facility.
- Eliminate extensive wiring back to the thermostat controller or packaged unit.
- Continuous temperature logging with battery operation in the event of a facility power outage.

Daintree Network Architecture

Wireless Sensor Adapter, (WSA10)

Connector	Connector Description
24 VAC/VDC +	Input Power (+)
24 VAC/VDC –	Input Power (-)
GND	Reference Ground

Wireless Sensor Adapter (WSA10)

Connector	Connector Description
0-10V IN 1	0-10VDC analog input #1
0-10V IN 2	0-10VDC analog input #2
NTC IN 1 +	Thermistor Input #1
NTC IN 1 -	Thermistor Input #1
NTC IN 2 +	Thermistor Input #2
NTC IN 2 -	Thermistor Input #2
NTC IN 3 +	Thermistor Input #3
NTC IN 3 -	Thermistor Input #3
NTC IN 4 +	Thermistor Input #4
NTC IN 4 -	Thermistor Input #4

Warranty

Current offers a limited Warranty across its Daintree Portfolio. The table below summarizes the Warranty terms. For additional information, please review the Limited Warranty Document on the Daintree Homepage.

Component	Warranty Period	Coverage Details
Daintree Software	1 year (on-premise installed Software) Subscription term (SaaS) 3 years	GE warrants that as long as all applicable fees due are paid, Daintree Software will substantially conform to the applicable published documentation and published specifications for the Warranty Period.
System Controller	3 years	100% parts coverage. Warranty for non-Daintree software (such as operating system software) is provided by the respective software; GE makes no warranty with respect to non-Daintree software.
WACs	5 years	100% parts coverage
Wireless Adapters	5 years	100% parts coverage
Wireless Devices	5 years	100% parts coverage, excluding batteries
Wireless Thermostats	2 years	100% parts coverage

Specifications

General	
Dimensions	1.18" W x 0.98" H x 7.03" L (30mm W x 25mm H x 178.5mm L)
Mounting	Wall, ceiling, enclosure screw mount
Indicators	Green LED (power) Green LED (joined network) Red LED (error state; low battery)
Warranty	5 Years
Power	
Input	Voltage: 24V (AC/DC); Current: 10mA
Inputs	
Resistance	(4) Thermistor, 10K Type 2
Voltage	(2) 0-10VDC
Accuracy (Resistance)	+/- 0.5°C (-10°C to 45°C) +/- 1°C (-30°C to 65°C)
Accuracy (Voltage)	+/- 2% of span (without calibration)
Battery Backup	
Battery Type	(1) AA 3.6V lithium thionyl chloride Internal, non-field replaceable
Operating Life	7 years or greater
Battery Life	Min 5,000 hours (@ 25°C op. temp.) Backup operation only
Temperature data logging storage	14 days; 5 min sampling interval Thermistor inputs only
Environmental	
Operating Temperature	32°F to +122°F (0°C to 50°C)
Relative Humidity	5% to 95%, non-condensing
ZigBee	
Frequency	2.4 GHz
Transmit Power	+8dBm
Compliance	
US	FCC Part 15
Canada	IC

Product Code	Product Description
WSA10	Wireless Sensor Adapter