Cut Sheet

Wireless General Purpose Adapter – WGA100

Product Overview

The Daintree Networks WGA100 Wireless General Purpose Adapter is a control component within the ControlScope™ wireless lighting control platform, and is used to enable open, standards based ZigBee wireless control communications with a variety of devices used in building management.

The WGA100 provides On/Off switching and 0-10V analog control as well as reporting and monitoring capability of binary and 0-10V analog signal inputs for a variety of building applications. Binary outputs can be used to wirelessly control devices such as pumps, motors and contactors, while connecting a device to one of the low voltage binary inputs allows the ControlScope Manager (CSM) software application to report the On/Off state of the attached device. The 0-10V analog output can be used to wirelessly control the variable speed of a fan, while connecting the 0-10V analog input to a multi-state device, such as a temperature sensor, allows CSM to report the current temperature in real-time.

Wire Color	Application
HIGH VOLTAGE (AWG14)	
Black	Active
White	Neutral
Red	Switched Binary Output
LOW VOLTAGE (AWG22)	
Red	24VDC
Black	Reference Ground (Digital)
Gray	Reference Ground (Analog)
Violet	0-10V Analog output
Orange	0-10V Analog input
Blue	Binary input
Yellow	Binary input
Green	Binary output (low side driver)

Specifications	
Dimensions	1.18” H x 1.7” W x 9.4” D
Operating Environment	-4°F to +149°F (-20°C to +65°C) Dry location (or inside Listed non-metallic waterproof enclosure)
Indicators	Green LED (power) Green LED (joined network) Red LED (error state)
Mounting	Snap-in 1/2” nipple for junction box mount; Screw tab and optional mounting bracket
Switched Binary Output (relay)	15A @ 120-277 VAC 1hp @ 120-230 VAC
Binary Output	(1) LSD (low side driver); aux relay control; 75mA maximum (including attached sensors)
Binary Input	(2) Active high
Analog Output	(1) 0-10VDC, 5mA maximum
Analog Input	(1) 0-10VDC
Power	120-277 VAC 50/60Hz
Power Consumption	0.95W (@277V; Relay ON) 0.51W (@277V; Idle, Relay OFF)
Low Voltage Output	24VDC; 75mA

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ControlScope Manager Integration

The WGA100 Wireless General Purpose Adapter is supported by the ControlScope Manager web application, providing complete online access to monitor and control a variety of building devices across one or multiple facilities.

Environmental Monitoring

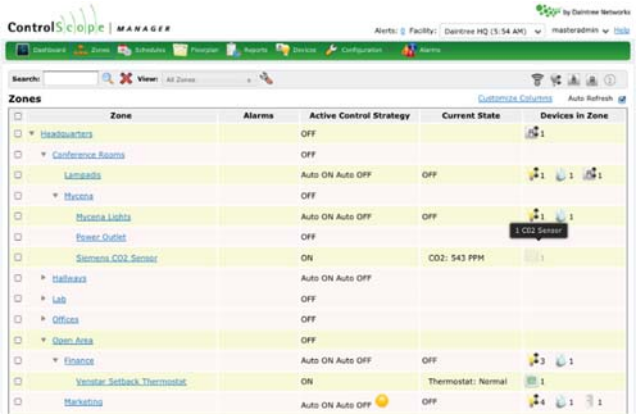
Ensure correct operation of **heating and cooling systems** with system-wide monitoring of temperature and humidity:

- Room
- Outdoor
- Duct, discharge and return air

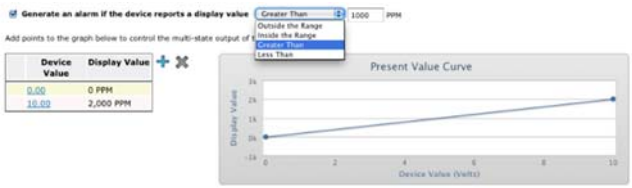
Protect inventory and verify within specification operation of **refrigeration and freezer equipment** in small commercial applications such as food service, c-store and small box retail, using environmental sensors:

- Temperature, Humidity
- Pressure
- Refrigerants

Check air quality (e.g., CO2), pressure, temperature and humidity sensors for optimal operation of **ventilation systems**.



Generate system alarms and email alerts when configured thresholds are exceeded.

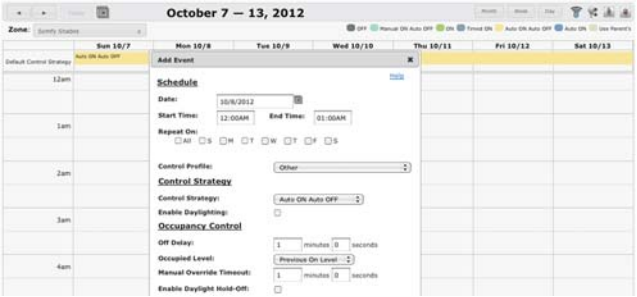


Schedule and Occupancy-based Control

Actuate binary (e.g., On/Off) and multi-state (e.g., 0-10V) devices using standard, time-based schedules.

Trigger device actuation using occupancy detection from installed motion sensors that are simultaneously automating lighting controls.

- E.g., manage a setback thermostat between two set points in response to occupancy and vacancy events.



Ordering Information

Specification Data	
Job Name	
Job #	
Catalog #	
Comments	

Product Number	Product Description
WGA100	Wireless General Purpose Adapter

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