

Daintree® Wireless Controls

WGA100 Wireless General Purpose Adapter

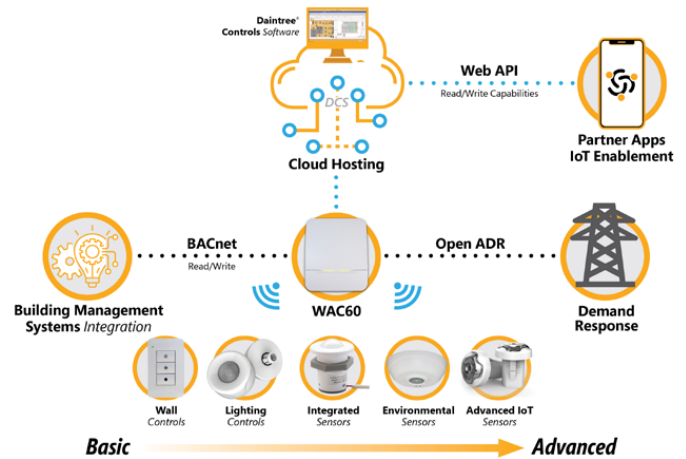
Project Name _____

Date _____ Type _____

Catalog Number _____



Daintree® Networked Architecture



Description

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 on the Daintree Networked platform.

Binary outputs can be used to wirelessly control devices such as pumps, motors and contractors, while connecting a device to one of the low voltage binary inputs allows the Daintree Controls Software (DCS) web 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 DCS to report the current temperature in real-time.

Ordering Information

Product Code	Product Description
WGA100	Wireless General Purpose Adapter

Daintree® Networked | WGA100 Wireless General Purpose Adapter

Daintree Controls Software Integration

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

DCS allows the integration of any off the shelf 0-10V environmental sensors. Additional third-party devices can be easily integrated into the Daintree Networked platform by selecting the type of sensor and the capabilities that the device is capable of in the DCS web application.

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.

Add Equipment

Name: Example

Interface Type: Select Interface Type
Analog Input (0-10V)

Capabilities: Search...
CO Sensor
CO2 Sensor
Current Sensor
Humidity Sensor
Light Measurement
PPFD Sensor
Temperature Sensor
VOC Sensor
Voltage Sensor

Manufacturer:

Model:

Notes:

Add Equipment

Name: Example

Interface Type: Select Interface Type
Binary Input

Capabilities: Water Leak Sensor
Water Leak Sensor

Manufacturer:

Model:

Notes:

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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 (IoT Cloud installed Software) Subscription term (SaaS) 3 years	Current 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; Current 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

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

Specifications

WGA100	Wireless General Purpose Adapter
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) 24VDC
Binary Input	Binary Input (2): Active high (> = 8.25V). Max 40V, Impedance ~22K Analog Input (1): 0-10V, Max 24V, Input resistance ~90K sensors) 24VDC
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

WGA100

CAUTION

RISK OF EXPOSURE IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSAL OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS