

# | 1. GATEWAY & BRIDGE SERIES

## 1.3 IP Green/Blue Gateway with 2DI, 1AI IPGBGW3

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2. Dimming Series
3. Relay Series
4. Climate Series
5. Guest Room Series
6. Human Interface Series
7. I/O Series
8. Power Supply Series
9. Multiroom Audio Series
10. Motorization Series



## I DESCRIPTION

The Green IoT CONTROLS (Green IoT) IPGBGW3 IP Green/Blue Gateway with 2DI, 1AI is a protocol communication converter between GreenBUS, BlueBus and Ethernet.

The module joins our meshed network system to allow a seamless integration between our wired and wireless systems.

This allows Green IoT and Blue IoT CONTROLS (Blue IoT) installations to be integrated into advanced access control and security systems, fire alarm panels, digital surveillance, RFID, Audio and Video systems and other systems via TCP/UDP/IP.

It provides 2 dry contact digital inputs that can be used to report multiple aspects of the system like maintenance schedule sync, backup Power Supply Advanced Module (PM2402A) status, automation distribution panel (ADP) security and many more. It comes with 0-10V signal input channel used for integrating (3rd party) analog output sensors.

The IP Green/Blue Gateway with 2DI, 1AI is used to bridge between GreenBUS, BlueBUS networks, Smart IoT CONTROLS (apps complete suite) and Smart IoT CONTROLS Configuration Client software (that allows configuration of various GreenBUS/BlueBUS devices as well as the monitoring of device state changes).

In addition, it allows online Internet and mobile device control of GreenBUS installation from remote locations without the need for a local server/PC.

The advance operation of the embedded controller is to act as a centralized processor that reports all the transactions related to all the metadata associated with the loads and devices being controller. Hence, allowing the seamless control and integration with community services, facility management and/or any other cloud-base connectivity/solutions. This makes it the building block (enabler) for smart city connectivity.

## | DEVICE FEATURES

BlueBUS and GreenBUS interface with selectable baud rate.

Provides two-way communication between networks.

Speed, Link and Health LED indicators.

Provides the option of 3.3V battery to maintain time in case of power or internet loss.

Built-in TCP and UDP List for remote access.

2 Dry contact digital inputs and 1 0-10V signal analog input.

Simple, sliding module connection ensures error-free GreenBUS installation.

Incorporates Zone and Category grouping.

Built-in Timer engines supporting up to 16 Timers.

Built-in Event engine supporting triggers, conditions and actions.

Flags can be defined to be used as triggers and/or conditions for Event engine.

Customizable IP address and port.

All configuration data can be imported or exported using a PC.

Connects up to 64 input/output devices outside the ADP.

Time and date auto-update via the Internet (manually configurable if no connection is present).

Supports Muslim prayer time for both leap and non-leap years worldwide.

Reports transactions related to the metadata associated with the loads and devices.

Programmable onsite or offsite via Smart IoT CONTROLS Configuration Client Software.

Programmed variables are stored in nonvolatile memory and are retained in case of loss of mains or GreenBUS power.

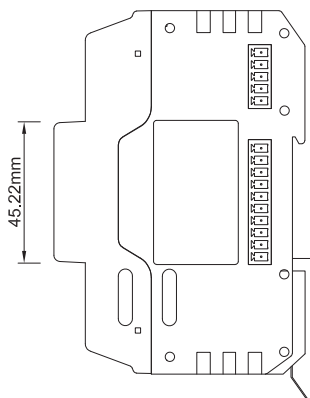
Supports local and online upgrade.

CE & RoHs certified.

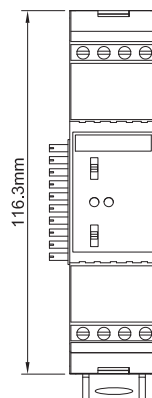
## TECHNICAL SPECIFICATIONS

Processor:	1.8MHz, Flashless, 200Kbyte RAM
Memory:	16MByte SPIFI Serial Flash
Additional Solid-state Memory:	8GByte (expandable as needed)
Ethernet:	RJ45 10/100Mbit Ethernet
Operation Voltage:	DC 24V ±10% (BUS Powered)
Power Consumption:	Approximately 80mA
Working Temperature:	0°C ~ +55°C
Storage Temperature:	-10°C ~ +55°C
Working Humidity:	20% ~ 90%
Storage Humidity:	10% ~ 90%
Installation:	35mm DIN rail mounting, EN50022
Communication	RS485, TCP/UDP/IP
Module Dimension:	55.78x116.3x80.3mm (WxHxD)
Packing Dimension:	65x125x90mm (WxHxD)
Net Weight:	180g
Gross Weight:	215g
Protection Class:	IP20, EN60 529

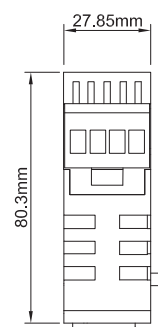
## DIMENSIONS



Side View



Front View



Top View

# INSTALLATION

## Step 1:

Turn the module (see Figure 1) and mount it on the 35mm DIN rail. Hook the module, top first, onto the DIN rail then gently press the bottom of the module onto the rail and ensure that it latches on firmly (see Figure 2).

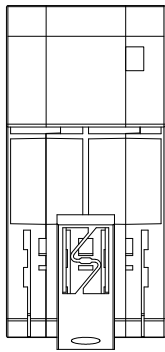


Figure 1

## Step 2:

Join the modules together by sliding them together along the DIN rail ensuring that the GreenBUS plug (see Figure 2) fully locates into the next modules GreenBUS socket (see Figure 3).

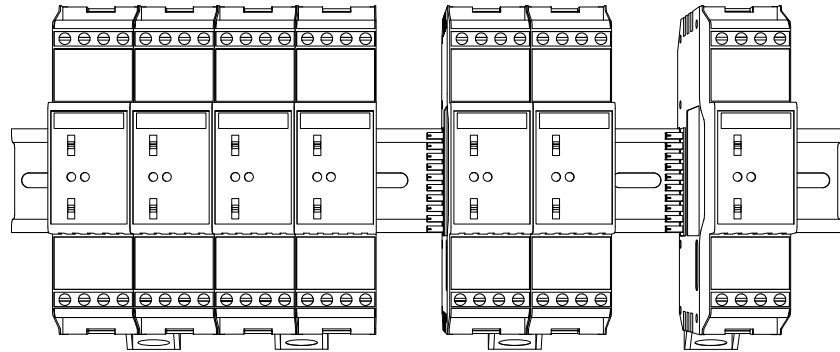


Figure 2

## Step 3:

Wire remaining terminals in accordance with wiring diagram (see Figure 4).

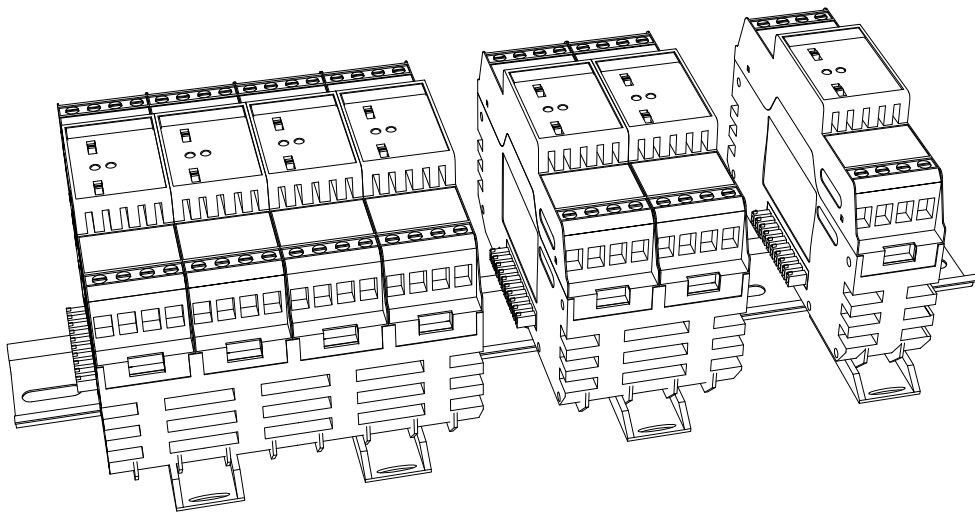
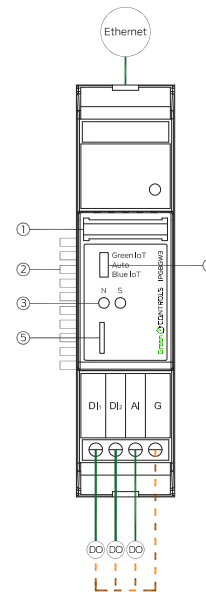


Figure 3

# WIRING DIAGRAM

Ground -----  
 I/O Wire —————

1. Label(s)
2. GreenBUS Connector
3. LED Indicator(s)
4. Channel (s) State Lock
5. Sim Card Slot



**Figure 4:** Wiring Diagram

# RECOMMENDED CABLES

**Module power input cable:**

2.0mm<sup>2</sup> electrical copper wire.

**Load output wire:**

2.0mm<sup>2</sup> electrical copper wire.

**Recommended cable configuration:**

GND = **Brown** and **White** + **Orange** and **White**

B-(B)= **Blue** and **White** + **Green** and **White**

B+(A)= **Blue** + **Green**

24V = **Brown** + **Orange**

