1. GATEWAY & BRIDGE SERIES

1.1 IP Green Gateway

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
**DESCRIPTION**

The Green IoT CONTROLS (Green IoT) IPGG064 IP Green Gateway is a protocol communication converter between GreenBUS and Ethernet.

This allows Green 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.

The IP Green Gateway is used to bridge between GreenBUS network, Smart IoT CONTROLS (apps complete suite) and Smart IoT CONTROLS Configuration Client software (that allows configuration of various GreenBUS 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.

The module is also coming with a DIP switch that allows the Green IoT wired module to be Blue IoT CONTROLS (Blue IoT) ready enabling it to wirelessly join our meshed network system using the Green/Blue Bridge.
1 DEVICE FEATURES

- 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/date in case of power or internet loss.
- Built-in TCP and UDP List for remote access.
- Simple, sliding module connection ensures error-free GreenBUS installation.
- Incorporates Zone and Category grouping.
- Built-in Timer engines supporting up 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.
- Digital input for fire alarm integration.
- Supports local and online upgrade.
- CE & RoHs certified.
## TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
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<tbody>
<tr>
<td>Processor</td>
<td>1.8MHz, Flashless, 200Kbyte RAM</td>
</tr>
<tr>
<td>Memory</td>
<td>16MByte SPIFI Serial Flash</td>
</tr>
<tr>
<td>Additional Solid-state Memory</td>
<td>8GByte (expandable as needed)</td>
</tr>
<tr>
<td>Ethernet</td>
<td>RJ45 10/100Mbit Ethernet</td>
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<tr>
<td>Operation Voltage</td>
<td>DC 24V ±10% (BUS Powered)</td>
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<tr>
<td>Power Consumption</td>
<td>Approximately 75mA</td>
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<tr>
<td>Working Temperature</td>
<td>0°C ~ +55°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-10°C ~ +55°C</td>
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<tr>
<td>Working Humidity</td>
<td>20% ~ 90%</td>
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<tr>
<td>Storage Humidity</td>
<td>10% ~ 90%</td>
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<tr>
<td>Installation</td>
<td>35mm DIN rail mounting, EN50022</td>
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<tr>
<td>Communication</td>
<td>RS485, TCP/UDP/IP</td>
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<tr>
<td>Module Dimension</td>
<td>55.78x116.3x80.3mm (WxHxD)</td>
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<tr>
<td>Packing Dimension</td>
<td>65x125x90mm (WxHxD)</td>
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<tr>
<td>Net Weight</td>
<td>145g</td>
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<tr>
<td>Gross Weight</td>
<td>180g</td>
</tr>
<tr>
<td>Protection Class</td>
<td>IP20, EN60 529</td>
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## DIMENSIONS

![Side View](#)  
![Front View](#)  
![Top View](#)
I 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).

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).

Step 3:
Wire remaining terminals in accordance with wiring diagram (see Figure 4).
**WIRING DIAGRAM**

**I/O Wire**

1. Label(s)
2. GreenBUS Connector
3. LED Indicator(s)

![Wiring Diagram](image)

**RECOMMENDED CABLES**

**Module power input cable:**
2.0mm² electrical copper wire.

**Load output wire:**
2.0mm² 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