1. Gateway & Bridge Series
2. Dimming Series
3. Relay Series
4. Climate Series
5. Guest Room Series

6. HUMAN INTERFACE SERIES

6.8 Smart LCD Panel, 12 Btms EU with RH HP12X2E

7. I/O Series
8. Power Supply Series
9. Multiroom Audio Series
10. Motorization Series
I DESCRIPTION

The Green IoT CONTROLS (Green IoT) HP12X2E Smart LCD Panel, 12 Btns EU with RH is a GreenBUS device that allows powerful control features. It has a terminal with 12 buttons that have LED indicators (green, red and orange) that are configurable in different combinations to suit the user's needs and indicate the status of the controlled devices. It comes with a built-in humidity, temperature sensor and IR receiver.

It allows the control of lighting, curtains, climate control, audio, media devices, security and many others.

Additionally, and aside from controlling individual channels it allows group control of Zone and Category.

It also incorporates advanced control features of Scene, Sequence, Timer and Event. All from the convenience of up to 14 pages, with scroll buttons to flip between the pages.

The 240x320 pixel LCD screen incorporates a backlight that can be turned off completely if necessary. Text and images can be defined in the Smart IoT CONTROLS Configuration Client Software and downloaded to the device via a microSD card.

Build in terminals for 3W external ohm speaker connection to enable audio playback.

It can be connected to wired or wireless switch base. RF antenna embedded to enable better wireless connectivity.
**DEVICE FEATURES**

12 Buttons per page, each can be enabled/disabled independently.

- Customized button labeling which can be individually downloaded as bitmaps.
- Multi-language support and real-time clock display.
- 14 pages per device with independent show/hide or password locked.
- 7 Pages for custom applications (including security & audio), 7 pages for climate control.
- Custom applications including not limited to lighting, appliance, curtain/blind, audio, climate, media, and PC/APP control.
- Provides integration with security and safety systems.
- LED status indicators (red, green and orange) built into individual buttons, which can indicate the status of the devices being controlled.
- Default page option with time delay.
- Default standby LCD backlight/LED level option with time delay.
- Dimmable LCD backlight and LED indicators.
- Press options: single, double, long press, toggle, dim and momentary.
- Keypad sounder and speaker (terminals only) that can also be used to sound an alert/alarm.
- Built-in IR receiver (256 codes), humidity and temperature sensor with calibration option.
- Supports Zone, Category, Scene, Sequence, Timer and Event control.
- Up to 512 actions can be stored.
- Incorporates Zone and Category grouping.
- Built-in Timer engines supporting up to 16 Timers.
- Built-in Event engine supporting up to 32 Events with up to 8 triggers, 8 conditions and 128 actions.
- 32 Flags can be defined to be used as triggers and/or conditions for Event engine.
- 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 online upgrade.
- CE & RoHs certified.
**I TECHNICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td>Operation Voltage:</td>
<td>DC 24V ±10% (BUS Powered)</td>
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<td>Power Consumption:</td>
<td>25mA ±10%</td>
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<td>Channel Input:</td>
<td>2 Digital inputs (dry contact)</td>
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<td>IR Code Standard:</td>
<td>NEC</td>
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<tr>
<td>Working Temperature:</td>
<td>0°C ~ +55°C</td>
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<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>Color:</td>
<td>Black or Custom</td>
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<td>Installation:</td>
<td>76x76x35/47mm (WxHxD) Back box</td>
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<td>Device Dimension:</td>
<td>86.69x86.69x15.69mm (WxHxD)</td>
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<td>Packing Dimension:</td>
<td>120x115x65mm (WxHxD)</td>
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<td>Net Weight:</td>
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<td>Gross Weight:</td>
<td>190g</td>
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<td>Operation and Display:</td>
<td>Red and Green LED, for displaying the physical status</td>
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<td>CE Mark:</td>
<td>In accordance with EMC and LVD</td>
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<td>Protection Class:</td>
<td>IP20, EN60 529</td>
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**DIMENSIONS**

![Side View](image1.png)  
![Front View](image2.png)  
![Top View](image3.png)
I INSTALLATION

Step 1:
Align the panel to the selected switch base and click them firmly together (see Figure 1). Screw the metal plate to an appropriate back box on a well levelled surface (see Figure 2).

Step 2:
Insert the back side of the switch through the metal plate at the lower edge of that plate and slide upward to hear a smooth click sound ensuring the firm installation of the switch.

Step 3:
Wire remaining terminals in accordance with wiring diagram (see Figure 3). To dismantle the switch, insert the unlock key provided through the gap in the lower frame and slide down gently.
**WIRING DIAGRAM**

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1. Screw Hole
2. Base Connector

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**Figure 3: Wiring Diagram**

**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