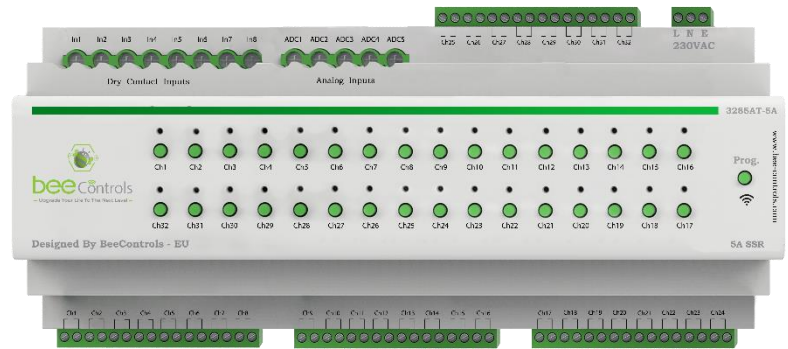




MQTT – BC16XX-8i5A

Universal MQTT I/O Wi-Fi Controller



Features

- The BC16XX-8i5A Inputs/outputs Controller is a MQTT based switching device with 8 dry contact inputs along with 5 ADC for all smart building automation and controls systems.
 - BK16-XX modules are available with 4, 8, 16, 24 and 32 channels compatible with MQTT Protocol which can be integrated to any MQTT Broker.
 - All Controllers are supplied by the 220Volt AC.
 - The communication of the devices via the MQTT protocol enables information exchanges with KNX sensors and the integration with BeeControls IOT Platform.
 - Moreover, in case of any communication failure, the manual buttons in the actuators can be used to control each output manually.
 - This series is equipped by isolation circuits for short circuit, Over Voltage and temperature protection.

Applications

- Lighting control can be made with every output of the Universal switch actuator.
- Heating control can be made with every output of the Universal switch actuator.
- Pumps, Valves, Parking Barriers & E-Locks control can be made with every output of the combo switch actuator.
- Every output of the universal actuator can be configured as shutter/blind provided that 2 consecutive outputs are available.
- The functionalities for each output include among other things timing functions, Inputs monitoring and working hours periodical operations, in addition to receiving the status feedback telegrams of each channel.
- Last state memory against power failure.

Configurations

IP Address

The universal MQTT controller has a default IP address 192.168.1.130 to be used while configuring the device via the LAN.

In addition to that there is another default IP address 192.168.1.133 for Wi-Fi connection.

Also, the device can work as an access point with default Ip address 192.168.1.135

Manual Control Button

Manual test can be carried out Via the push buttons present on the device; the load connected to each output can be controlled manually. This manual control function has priority over the commands received from the MQTT servers.

Status Led

The button led indicates the status of the outputs. When the green led is on, the output relays are closed.

Configuration

The complete configuration of the device is carried out via the controller web interface.



Mounting & Safety instructions

- The device should only be installed and put into operation by qualified electrician or authorized person.
- Failure to observe the instructions may cause damage to the device and result in fire and other hazards
- Do not connect the digital inputs to any external voltage source.
- Ensure that there is enough insulation and space between the 230 VAC voltage cables and input cables.
- Installation only in dry locations and on a 35 mm DIN rail (35 mm) and do not expose this device to direct sunlight, rain or high humidity.
- Do not use aerosol sprays, solvents or abrasives that might damage the device.
- Accessibility of the device for operation and visual inspection must be provided.





Technical Data

Electrical Parameters						
Device Name	BC1004U	BC1008U	BC1016U	BC1020U	BC1024U	BC1032U
Output Channels Number	4	8	16	20	24	24
No. of digital inputs	8	8	8	8	8	8
No. of analog inputs	5	5	5	5	5	5
Input type	Dry Contact	Dry Contact	Dry Contact	Dry Contact	Dry Contact	Dry Contact
Analog Max. Input	3.3V	3.3V	3.3V	3.3V	3.3V	3.3V
Power Supply	220 VAC					
Current consumption	>20mA					
Output current	10A @ 240 Volt AC					
Contact resistance	100mΩ (at 1A 6VDC)					
Max switching Power/Channel	210W					
Power consumption	3W	5W	10W	14W	16W	18W
Available Interfaces	Wi-Fi, Ethernet (Optional), RS485 (Optional)					
Network frequency	50~60 Hz					
Communication Protocol	MQTT, MODBUS, TCP, HTTP & ASCII					
Environmental parameters						
Operating Humidity	>90 RH					
Storage Humidity	Up to 92%					
Operating temperature	-10°C ~ +60°C					
Storage Temperature	-15°C ~ +70°C					
Transport Temperature	-15°C ~ +85°C					
Device Parameters						
Protection type	IP20					
Mode of communication	Wi-fi					
Mounting	(35m) Din-Rail					
Flammability	Non-Flammable Product					
Dimensions (H) mm	90					
PCB Dimensions (W x D) mm	90 X 86	90 X 115	90 X 250	90 X 250	120 X 250	120 X 380
I/O Connector	0.6 ~0.8 Ø, solid					
Output connectors	Screw terminal, 2.5 mm ² stranded ~ 3 mm ² Solid					
Tightening torque	Maximum 0.5 Nm					
Available colors	Transparent Black & Transparent Light Gray					