

Description

The lighting relay controller is designed to manage lighting relays. This is a low cost module which you can send commands from your master controller to turn the relays on and off, also it lets you see the status of the relay. Each module can manage 7 relays, you can combine many modules onto an RS485 network using twisted pair wiring. The protocol is Modbus and Bacnet.

Highlights:

- Permanent Magnetic-Latching Technology;
- Extended-Life Contact Design;
- Threaded Contact for Easy Wiring;
- Modbus and Bacnet protocol;
- Management possible by simple setting;
- Low energy consumption.

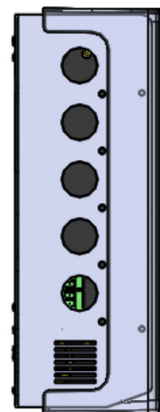
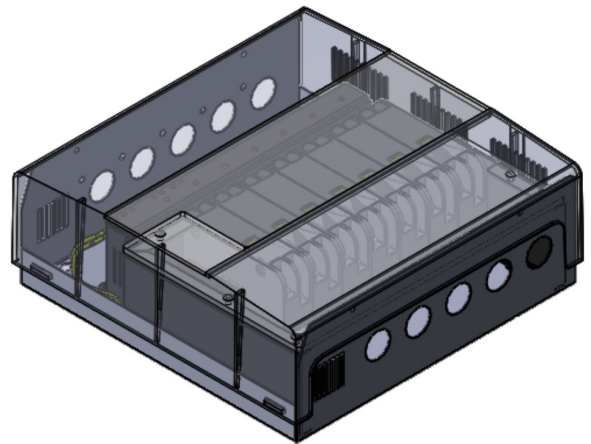
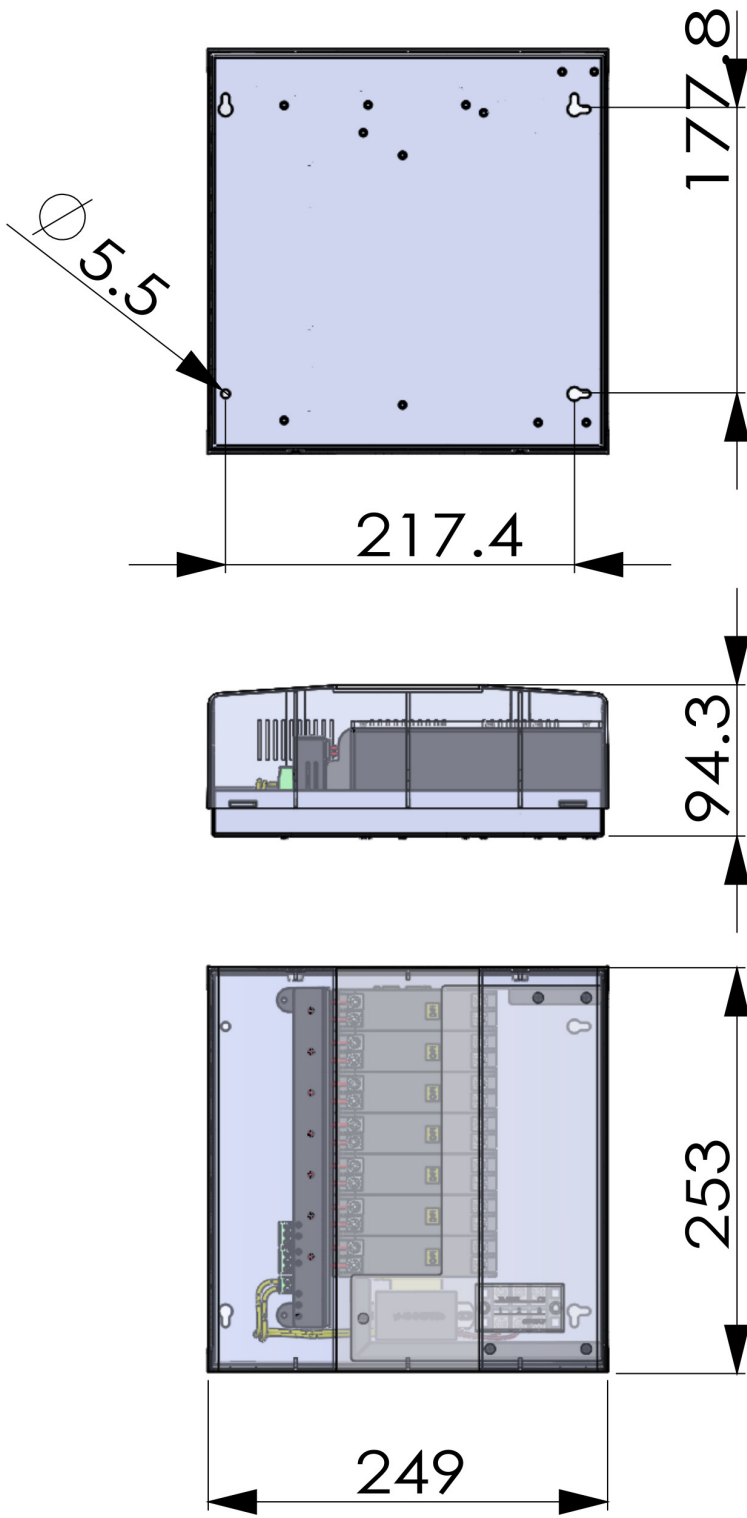


Specifications

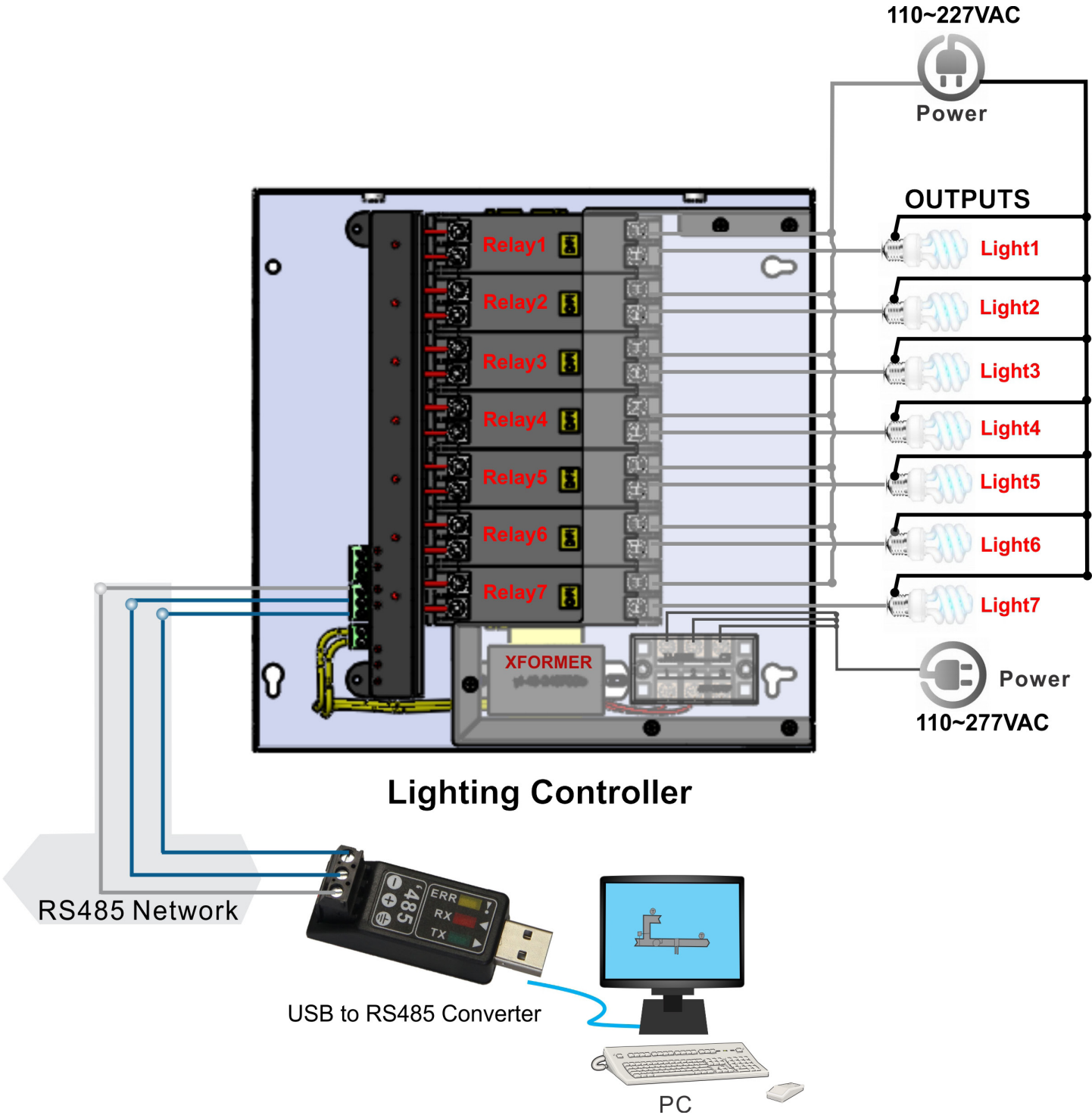
Relay	7 relay 25A@300-480VAC
Baudrate	9600, 19200, 38400, 57600, 115200
Operating Temperature	-30~70°C (-22~158°F)
Supply Voltage	110VAC ±10%, 50-60Hz
Power Consumption	200mA@110VAC
Storage Temperature	-40~85°C (-40~185°F)
Operating Ambient Humidity	0-80 %Rh
Communications	RS485, Bacnet
Enclosure Color	Red
Dimension	253(L)*249(W)*94(H)

Dimension

Unit:mm



Wiring Diagram



Internal Structure



Modbus Register List

Address	Register and Description
1~3	Serial Number -4 byte value. Read-only
4~5	Software Version -2 byte value. Read-only
6	ADDRESS. Modbus device address
7	Product Model. This is a read-only register that is used by the microcontroller to determine the product
8	Hardware Revision. This is a read-only register that is used by the microcontroller to determine the hardware Rev
9~14	Spare
15	Bau - Baudrate, 0=9.6kbaud, 1=19.2kbaud 2=38.4kbaud 3=57.6kbaud 4=115.2kbaud
16	Firmware Update Register, used to show the status of firmware updates
17~20	Spare
21	Protocol switch. 3 = MODBUS,0=MSTP.
22~100	Spare

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Address	Register and Description
101	Relay1 status. 0=Off,1=On
102	Relay2 status. 0=Off,1=On
103	Relay3 status. 0=Off,1=On
104	Relay4 status. 0=Off,1=On
105	Relay5 status. 0=Off,1=On
106	Relay6 status. 0=Off,1=On
107	Relay7 status. 0=Off,1=On

Bacnet Register List

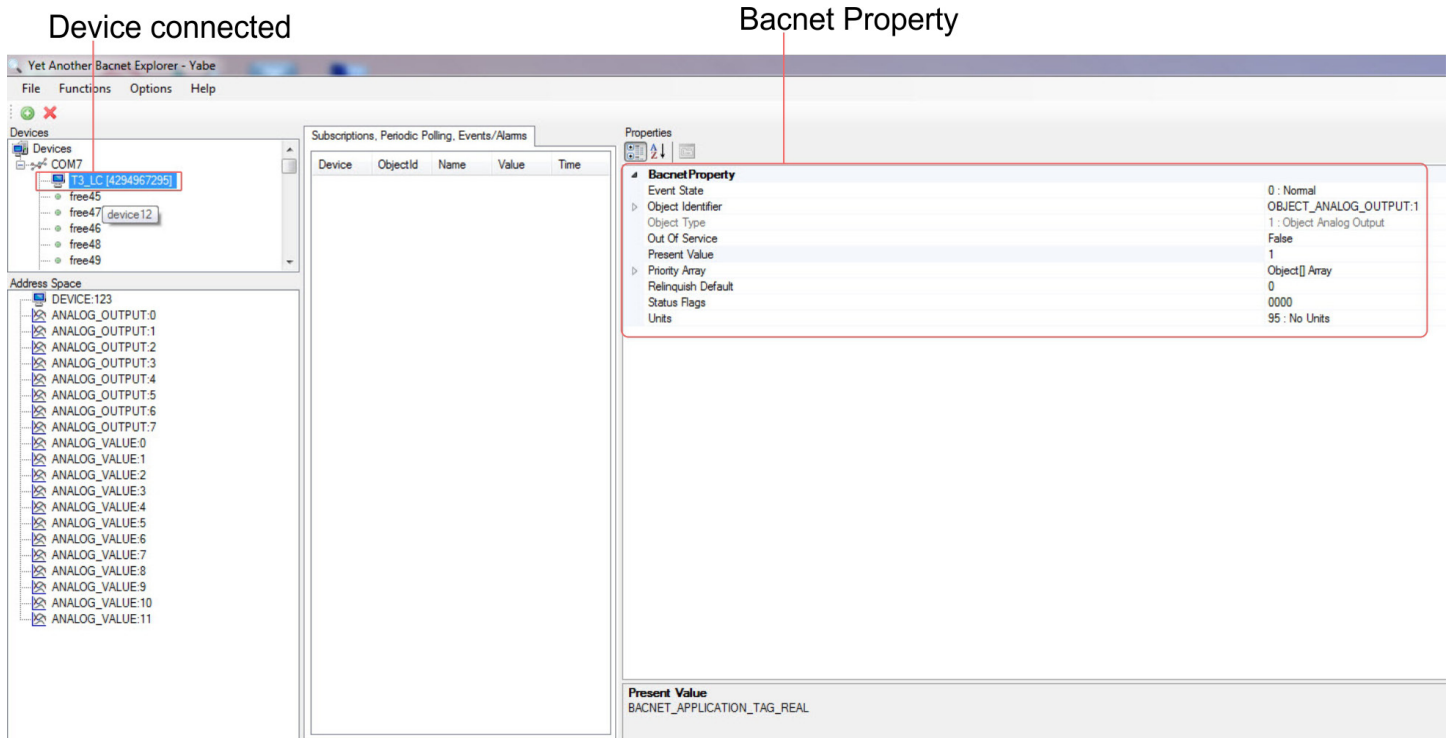
Variable	Variable and Description
0	SerialNumberLowByte
1	SerialNumberHighByte
2	SoftWare Version
3	ID Address
4	Product Model
5	Hardware Version
6	Uart BaudRate.0=9.6kbaud, 1=19.2kbaud 2=38.4kbaud 3=57.6kbaud 4=115.2kbaud
7	Update
8	Protocol. 0 = MSTP,3=Modbus
9	Instance
10	Station number
Outputs	Outputs and Description
1	Relay1 status. 0=Off,1=On
2	Relay2 status. 0=Off,1=On
3	Relay3 status. 0=Off,1=On
4	Relay4 status. 0=Off,1=On
5	Relay5 status. 0=Off,1=On
6	Relay6 status. 0=Off,1=On
7	Relay7 status. 0=Off,1=On

Lighting Controller

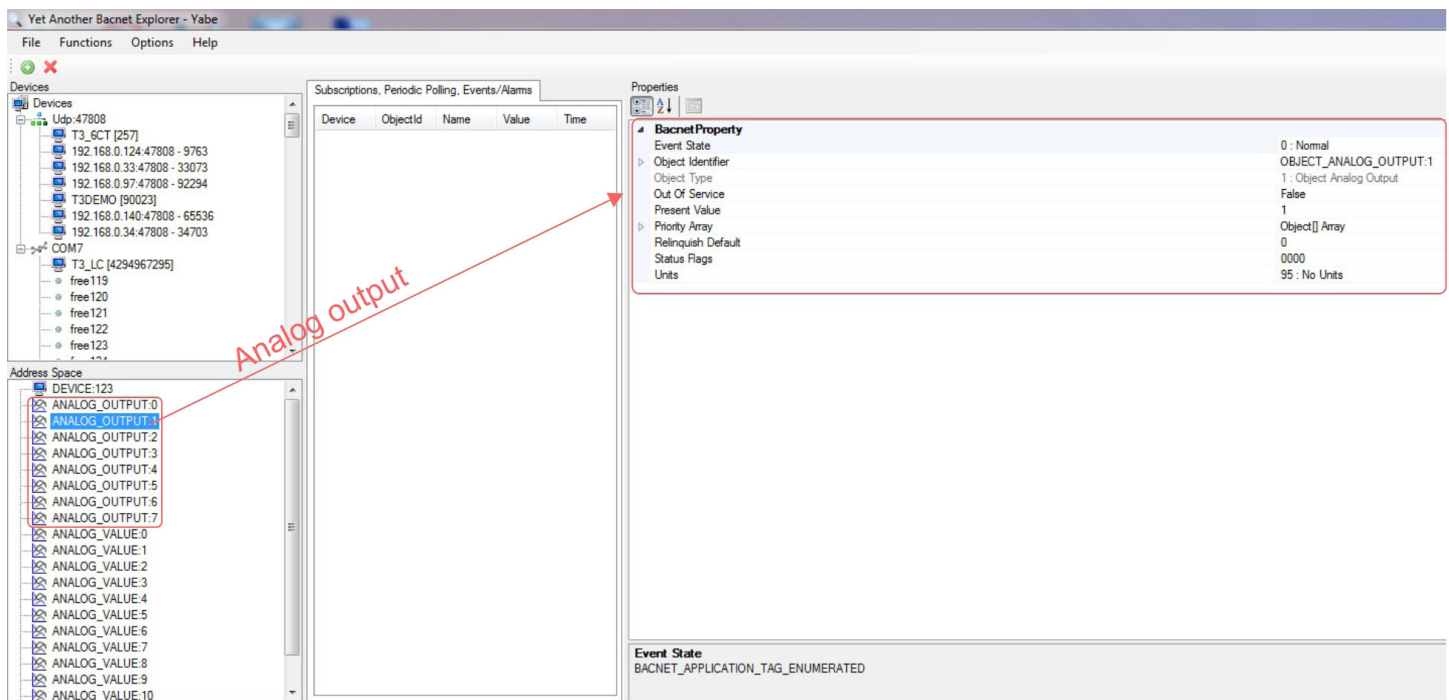
*To get the Bacnet information, you can also use a software "yabe", below are the procedures.

Step1. Download "yabe" software as the link <https://www.temcocontrols.com/ftp/software/08Yabe.zip>, and install it.

Step2. Connect the device to your computer, open "yabe" software, add the device to it.



Step3. In the "Address Space" tab, click the "ANALOG_OUTPUT", it will show the information of "log ANALOG_OUTPUT" in the BacnetProperty tab. And it's the same with "ANALOG_VALUE".



Lighting Controller

The screenshot displays the 'Yet Another Bacnet Explorer' interface. On the left, the 'Devices' tree shows a hierarchy including 'COM7' and 'T3_LC [4294967295]'. Below it, the 'Address Space' tree lists various objects, with 'ANALOG_VALUE:4' highlighted in blue. A red arrow points from this object to the 'Properties' pane on the right. The 'Properties' pane shows details for a 'BacnetProperty' with the following values:

Property Name	Value
Event State	0 : Normal
Object Identifier	OBJECT_ANALOG_VALUE:4
Object Type	2 : Object Analog Value
Out Of Service	False
Present Value	6
Status Flags	0000

At the bottom of the Properties pane, the 'Event State' is listed as 'BACNET_APPLICATION_TAG_ENUMERATED'. A red text label 'Analog value' is overlaid on the interface, with an arrow pointing to the highlighted object in the Address Space.