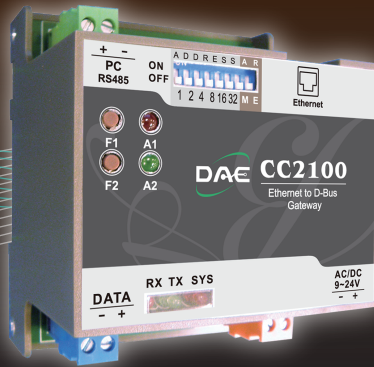# CC2100 Ethernet to D-Bus Gateway
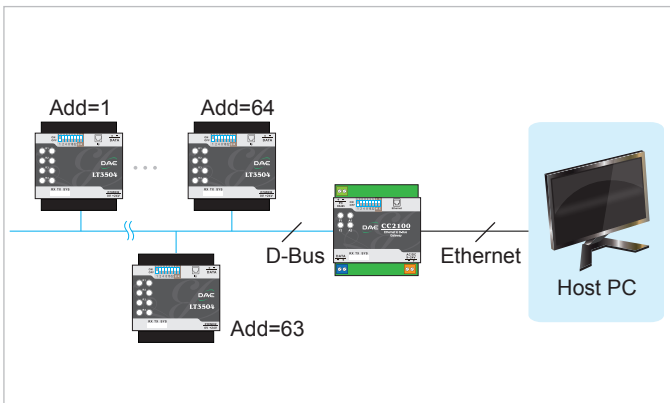
CC SERIES

DAE

Smart for Greenlife !

Features

- Ethernet or RS485 communication interface to host computer
- D-Bus device interface
- Fast response time to host
- Fast boot up, only 10 seconds to get system up and running
- Supports up to 256 lighting circuits from 64 LT modules

System Architecture

Description

- The CC2100 is a gateway for interfacing a host to the smart lighting control system. But it is more than just a gateway as it also automatically collects and buffers the data from the various LT modules connected to all for quicker response time. The CC2100 is based on the open industry standard Modbus protocol and allows for easy interfacing with all types of central host, including most BAS, industrial software and SCADA systems.

- The CC2100 works bidirectionally, not only does it always reflect the latest status of the relays, discrete inputs and analog inputs, but it can also issue commands to control the relays, set the analog outputs and control groups and activate patterns. During normal use, the response time is typically under 0.2 seconds both for commands issued and status reading.

- The CC2100 constantly listens in on the bus and this allows the data registers on the CC2100 to be always in sync with the status of the actual relays and the other digital switches. Even the manual control buttons on board each LT module is shown correctly. This guarantees that the data sent to the central host is always up to date.

- The CC2100 interfaces with the host primarily through either its Ethernet or RS485 interface, both of which is available and selectable from the DIP switch.

- The CC2100 is also equipped with communication status indicators which is useful as a testing tool during installation or troubleshooting.

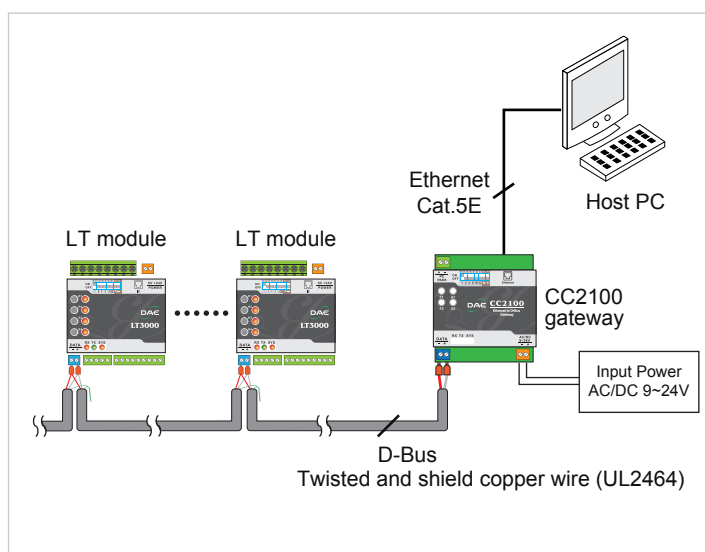## Front Panel and Terminals
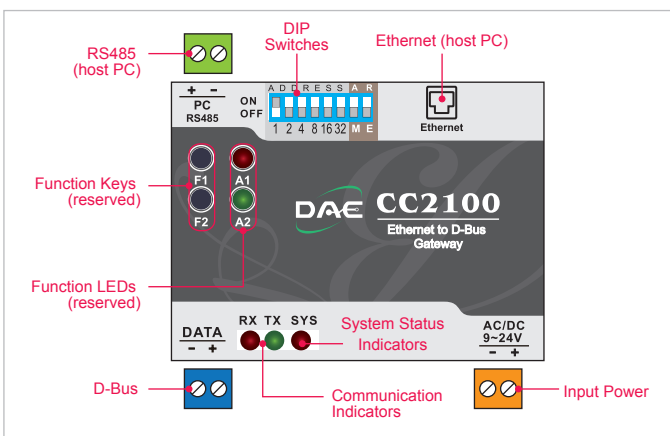
DIP Switches
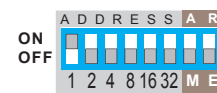
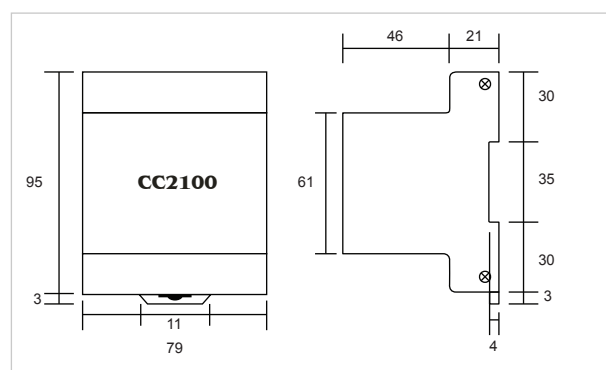| DIP		Description
1-6		address 1~64 (all off = 64)
7	A	Auxiliary, the CC2100 will NOT initiate a system wide query on boot up
	M	Main, the CC2100 will initiate a system wide query on boot up
8	R	Use RS485 to link with PC
	E	Use Ethernet to link with PC

Specifications

Item	Description
Input Power	AC/DC 9~24V
Power Consumption	2.4VA
Operating Environment	Temperature: 0 to 60°C Humidity: 0 to 90%RH (non-condensing)
Terminals and Wire Gauges	Power: orange terminals, 16 to 22 AWG Communication: blue terminals, 16 to 22 AWG green terminals, 16 to 22 AWG
CPU	88 MHz RISC processor
Flash Storage	1024KB
EEPROM	2KB
Ethernet Interface	10/100 Base-T Auto-MDIX Ethernet
Enclosure Material	ABS plastic
Mounting	DIN rail
Address Setting	1 to 64, set using DIP switch
Host Interface	Ethernet or RS485, selectable via DIP switch
Device Interface	D-Bus
LED Indicators	RX - communication receive activity TX - communication transmit activity SYS - system status
Boot Up Time	10 seconds
RS485 Communication	Protocol: Modbus/RTU Speed: 9600 bauds Data Format: 8/n/1
Function Keys and LEDs	2 function keys, both reserved 2 LED indicators, both reserved
Weight	177g

Wiring Diagram

LT module   LT module

Ethernet Cat.5E   Host PC

DAE LT3000

CC2100 gateway

Input Power AC/DC 9~24V

D-Bus
Twisted and shield copper wire (UL2464)

Dimensions

CC2100

46 21
30
95   61   35
30
3   3
11   4
79

Unit: mm   Weight: 177g

Ordering

Order Code	Description
CC2100	Ethernet to D-Bus gateway

This datasheet is for reference only, specifications subject to change without notice.

CC2100 datasheet-1.3e.ai

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