Power Meter Monitor

Model: PMM0910i
Document version: 1.1
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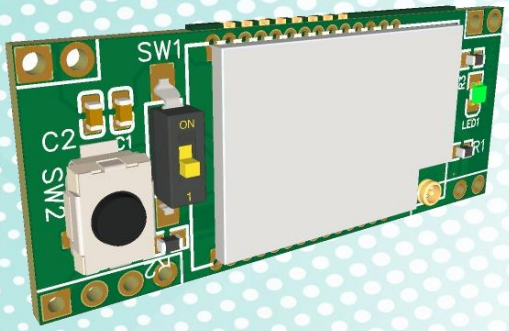


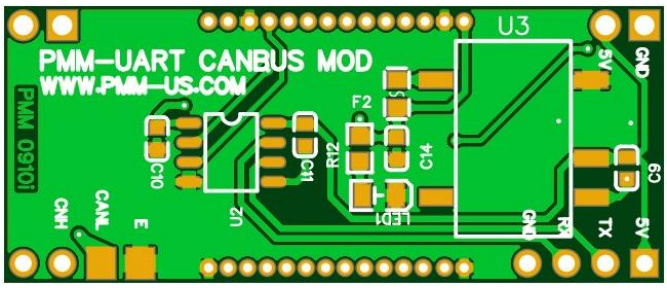
UART/TTL to CANBUS Converter Module

KEY FEATURES AND SPECIFICATIONS

- **Bidirectional conversion between UART and CAN is available**
- **Three types of conversion mode :**
  1. Transparent conversion
  2. Transparent tape identification
  3. Protocol mode conversion
- **Two CAN frame data types transmission methods:**
  1. Fixed configuration
  2. Serial frame data designation
- **Power isolation**
- **Data isolation (2500Vrms 1Mbps).**
- **Parameter configuration via UART interface is available**
- **UART baud rate : 300~921600**
- **Parameter setting mode entered via software and hardware**
- **Factory parameters is restored via software or hardware**
- **Multiple indications include power, status and mode.**
- **Module size: 43mm X 18mm X 3mm.**
- **Vertical and horizontal mounting options, compatible with standard DIP/SIP pinot.**
- **RoHS Compliant.**
- **Proven PCB Layout.**
- **Fully Assembled and Tested.**

BOARD PINOUT

12 13 14 15



1 2 3 4 5 6 7 8 9 10 11

DESCRIPTION

PMM0910i is an isolated CANBUS to UART/TTL converter. It integrates one channel CAN-BUS interface and one channel UART TTL interface, which can recognize mutual transparent transmission or Modbus protocol conversion between UART TTL signal and CAN-BUS.

PMM0910i is compact and can be powered from any 3.3V or 5V power supply for easy integration into a variety of boards.

WIRING CANBUS MODULE

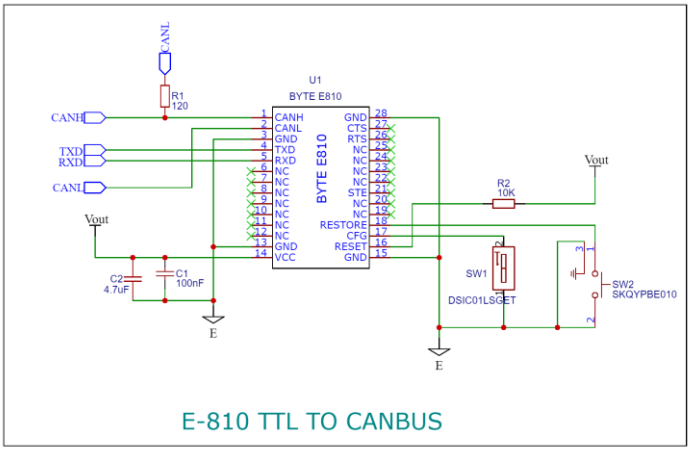
The Two data lines (labeled as CANH&CANL) on the output side of the module are connected to the communication network, the wiring should be straight through, where CANH on one end is connected to CANH on the other end and CANL connects to CANL .

The wires should ideally be twisted and shielded within one cable, this method is important as it runs for longer where there is a lot of electrical noise. The shield or the common ground is labeled as E in output side of the module.

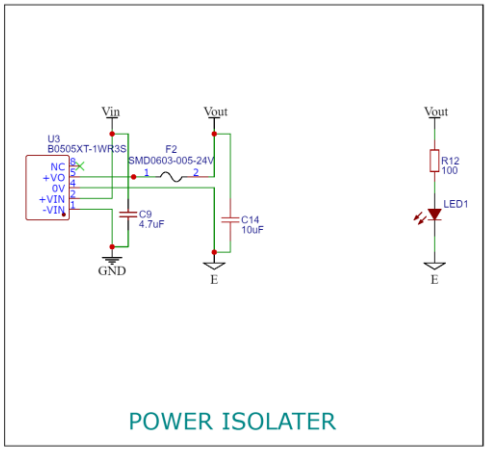
BOARD PINOUT

PINs	DESCRIPTION
1,5,6,7,12,13	NOT CONNECTED
2	SHIELD / COMMON GROUND
3	CANL OUTPUT
4	CANH OUTPUT
8,15	TTL/UART GND
9	TTL/UART RX
10	TTL/UART TX
11,14	(VCC) POWER SUPPLY: 5VDC OR 3.3VDC
NOTE	TTL level should match the connected VCC

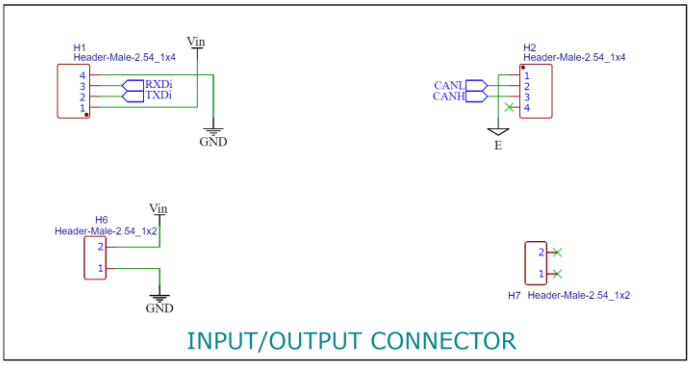
SCHEMATIC DIAGRAM



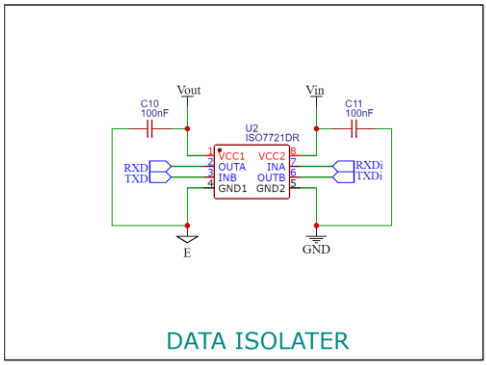
E-810 TTL TO CANBUS



POWER ISOLATER



INPUT/OUTPUT CONNECTOR



DATA ISOLATER

Entering Command Configuration Instructions

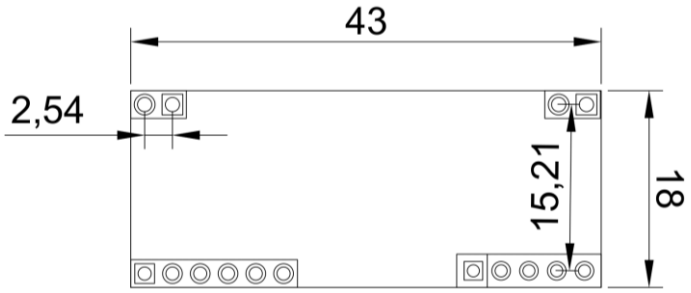
Use the **SW1** to Short-circuit the CFG pin to GND to enter the configuration mode directly. After entering, the module indicator flashing frequency becomes 5Hz (it flashes at 1Hz frequency in normal mode).

During the configuration process, the CFG pin must be kept low for all times. Send the AT command directly for configuration. After shorting and shorting, short reset pin by pressing the **SW2** for 5 seconds and the parameters take effect.

COMMAND LIST

AT	TEST COMMAND
CANFLT	Inquire/set CAN filter info.
CAN	Inquire/set CAN transmit parameter info.
EXAT	Exit AT command
E	Inquire/set AT command echo
MODBUSID	Inquire/set MODBUS ID
MODE	Inquire/set operating mode
MID	Inquire device info.
RESTORE	Restore factory default
REBT	Reset command
UARTPKT	Inquire/set UART sub-packing parameter
UART	Inquire/set UART parameter
VER	Inquire/set version

DIMENSIONS (mm)



ORDERING INFORMATION

Part Number	Description
PMM0910i	UART/TTL to CANBUS Converter Module (Isolated Type)

CUSTOMIZED REQUIREMENT

For any customized inquiries and orders, contact us on **info@Pmm-usa.us**