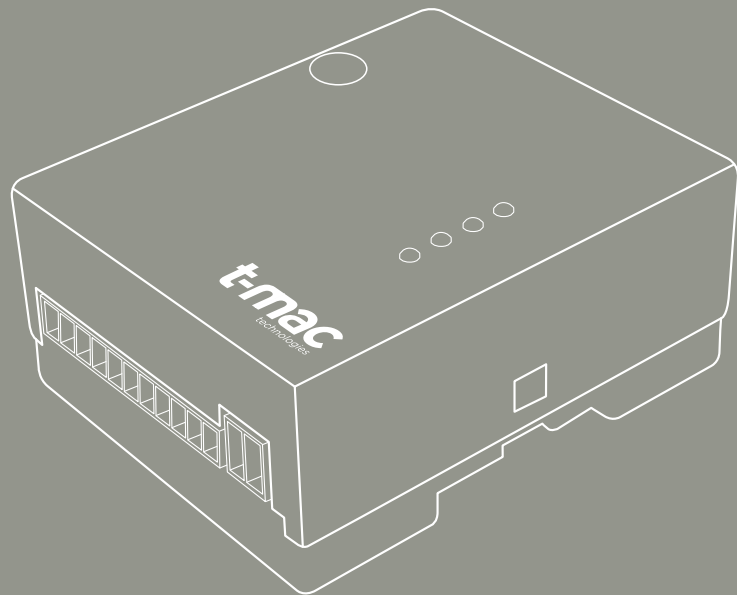


I/O EXPANSION MODULE

4 inputs + 4 outputs



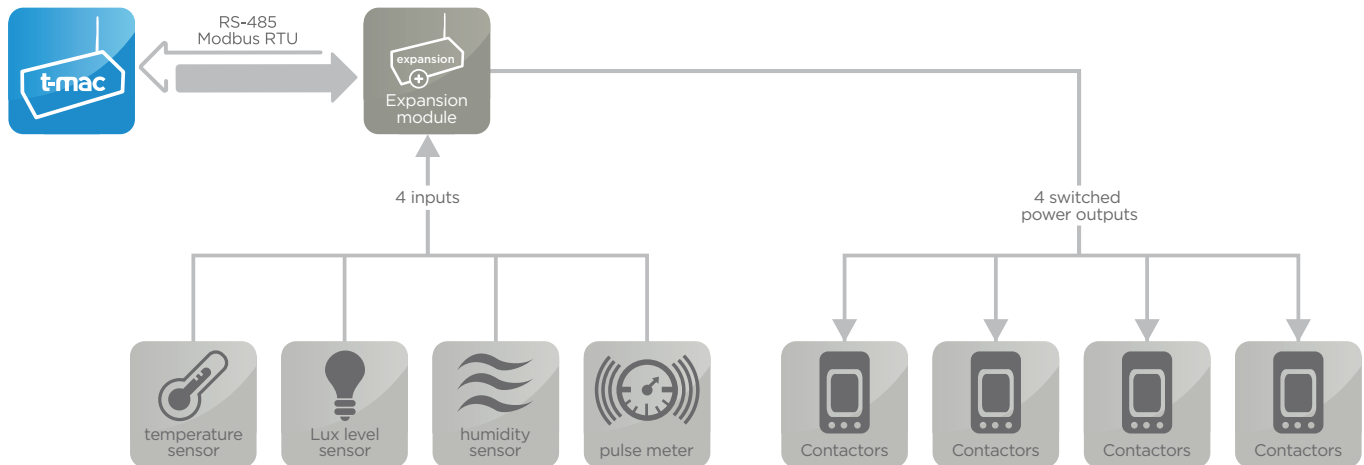
The I/O expansion module can be used to expand the I/O capabilities of any system which has an RS-485 Modbus RTU master (such as t-mac).

The inputs can be individually configured as Digital, 4-20mA, 0-10VDC or 10K thermistor. When set to Digital the inputs can be used to monitor and count pulsed signals from multi utility meters such as electricity, gas and water.

When set to the analogue ranges, the inputs can be used to monitor standard sensors such as temperature, humidity and light level. The 4 digital outputs can be used to control equipment and machinery by switching external contactors or relays.

The counters and (optionally) the digital output states are backed-up in non-volatile memory in case of power failure. All data is transmitted and received from the module via its RS-485 Modbus RTU interface.

Connection



Specifications

Interface Module

Supply	10-30V DC (50mA typical at 24VDC (with no outputs on))
Dimensions	85mm x 70mm x 36mm
Operating temp	0°C to + 40°C
Storage temp	-10°C to + 50°C
Terminals	16 AWG 1.5mm ²
Status Indicators	4 LEDs for Power, Modbus RX, Modbus TX, Error
Configurable Inputs	4
Digital Outputs	4

Digital Inputs

Counter resolution	32 Bit
Counter frequency	100 Hz
Pulse width	10 ms
Counter mode	Up
Digital input type	Volt-free or open-collector (5V wetting voltage)

To find out more about the t-mac system, please log-on to: www.t-mac.co.uk
or email us: info@t-mac.co.uk

Specifications

Digital Outputs

Type of digital output	Low sided switched power output
Maximum load current	100mA/channel
Load voltage	10-30VDC

Communications

Interface	RS-485 Modbus RTU
Address	1 default, 10/20/.../140 selectable via DIP switches (1-247 can be set via a Modbus register)
Baud Rate	9600 default (1200-57600 can be set via a Modbus register)
Parity	None default (Even/odd can be set via a Modbus register)
Stop bit	1

Ordering Information

Part No.	Description
001-1208	I/O Expansion Module (4 inputs + 4 outputs)



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