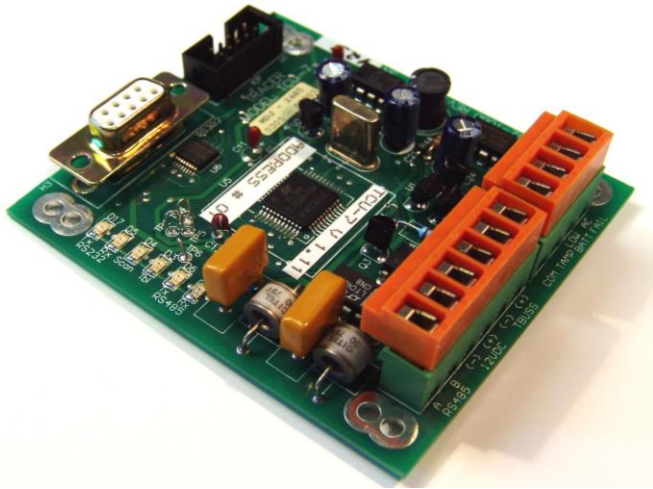


## TCU-8M Controller (Modbus)



Tracer's TCU-8Controller

User to T-Buss<sup>™</sup> interface

Monitor & Control 99 IDMs

### The T-BUSS

The T-Buss<sup>™</sup> is Tracer's patented low-cost multiplex system. Two-wires are used to power the ID Modules (IDMs), to send commands to the modules and to receive their data. The commands from the central polling controller to the IDMs take the form of modulating the Buss voltage between 0 and 10v. The data returned from the modules is in the form of increased T-Buss<sup>™</sup> current.

For technical details on the T-Buss<sup>™</sup> and its protocol, please contact Tracer's marketing group.

### APPLICATIONS

Interface between your system and the T-Buss<sup>™</sup>.

### HIGHLIGHTS

- Provides an interface between your system and the IDM (T-Buss) modules.
- Small size, Approx 2.25 Inches Square
- Meets UL 1459 600VDC input protection on the RS-485 data line.
- Modbus and other protocols available
- Can be installed in a 4x4 electrical box.
- LED indicators on both sides of the PC board.

### DESCRIPTION

The TCU-8 Controller can be communicated to by your host system via either RS-232 via a DB-9F or a RS-485 serial communications. The interface protocol can either be Modbus (TCU-8M) or a Proprietary protocol.

Tracer is working on other protocols set for future release. Consult factory for additional information.

The TCU-8 provides three dry contact inputs for connection to devices such as an AC failure, DC failure and tamper input as marked. User can assign these three dry contact inputs into any other function they desire.

T-Buss<sup>™</sup> Patented Technology

Single Board Controller

## IFICATIONS

<b>Supply Voltage:</b>	12 VDC @ 100Ma (300Ma needed to detect and report a short on the T-Buss™)
<b>Dimension:</b>	2.25" x 2.25" PC board (fits in a 4x4 electrical box)
<b>Inputs:</b>	Three user selectable dry contact inputs (reported as 100, 101 & 102), T-Buss™, 12VDC input power, COM terminal for Earth Ground (also via mounting holes).
<b>Communication:</b>	RS-232 (DB-9F) or RS-485 (Barrier block) via Modbus protocol (TCU-7M) 9600 BAUD 8N1. <a href="#">Contact Tracer for additional proprietary protocols</a> supporting Alarm Monitoring, real time data logging, and other industry standard protocols.
<b>LED:</b>	Green - Two each for TX & RX indication for each of the RS-232 and RS-485. RED - Scan & Trouble. Note: A duplicate set of LED appear on each side of the PC board to allow viewing regardless of mounting method.
<b>Lightning Protection:</b>	Gas tube (75V), impedance device and Transorb on each side of the RS-485 data line. Meets the UL 1459 requirement for lines leaving a building, for distances greater then 2,000 ft.

### The following input numbers are assigned and reported via Modbus by the TCU-8M:

- 100 – AC Fail
- 101 – Low Battery
- 102 – Tamper
- 103 – DC Trouble (high current, pre overload)
- 104 – DC Short (T-Buss™ has excessive current, polling stopped)

### The TCU-8M Modbus program supports the following commands in RTU (binary) format only:

- 0x01 Read Coil Status
- 0x02 Read Input Status
- 0x05 Force Single Coil
- 0x0F Force Multiple Coils

### Plus these proprietary commands:

- 0x43 Read EEPROM
- 0x44 Write EEPROM

