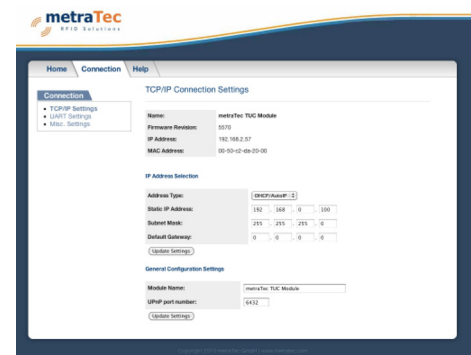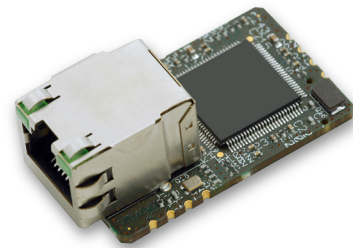# metraTec
RFID Solutions

metraTec® TCP/IP to UART Converter

More and more devices today require a connection to a data network to communicate with other devices in their environment. One of the most popular interfaces today is Ethernet which can be found almost anywhere. But the protocol requires high data rates and CPU speed and is therefore not available on many microcontrollers where easier interfaces such as UART are more common. The metraTec TCP/IP to UART Converter (TUC) solves this problem with a small module which gives your device an Ethernet interface without long development times.

The main focus of the product is its high usability - both during the development phase as well as for the end user of the product. Just connect 3.3V and a UART to the 40 x 25 mm SMD module and the integration is done. A free Eagle library is also included. Additionally, you can use the TUC to build a Power-over-Ethernet power supply since the voltage pins of the switch are routed through.

The configuration of the device is done via the integrated website or an easy to use configuration software which is available for Windows XP or higher, MacOS and Linux. The software automatically detects all TUC modules in the network and allows you to configure all parameters. You can also configure the device via the UART interface directly from the host.
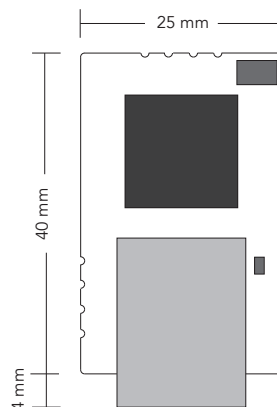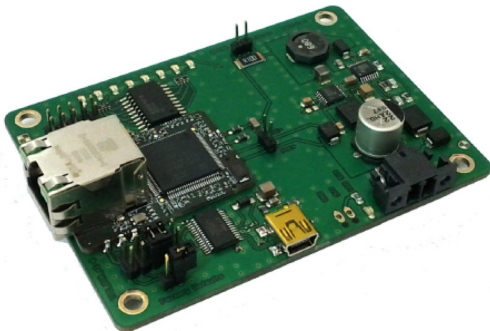
Besides pure data communication the TUC Module also has eight digital inputs/outputs which can be controlled via Ethernet. With this feature you can control a variety of simple devices without own UART interface directly over the company network.

metraTec
RFID Solutions

Technical Specification

Operating Principle	TCP/IP to UART Converter Module
UART Interface	3.3 V UART (5 V compatible)
Ethernet Interface	10/100MBit Ethernet (Auto-Detect)
Data Rate	From 9,600 Baud to 1 MBaud
Protocols	TCP/IP, Detection via uPnP / UDP
Operating Voltage	3.3 V DC
Power Consumption	130 mA typ., 180 mA max.
Digital Inputs/Outputs	8 x In/Out 3.3 V TTL (configurable)
Operating Temperature	0 °C to +70 °C
Dimensions	40 x 25 x 16 mm (LxWxH)
Configuration Options	Integrated Web Interface, free Config Software (for Windows XP or higher, MacOS and Linux with Java Runtime), ASCII Protocol

At a Glance

- Quick and cost effective integration of TCP/IP with UART interface
- SMD solderable with small footprint
- Easy configuration with free software

About metraTec

metraTec develops, manufactures and sells electronics for the product segments „Identification", „Localization", "Communication" and „Wireless Power". It serves a variety of industries, both with standard products as well as custom solutions. Our customers are system integrators, OEM customers as well as research institutes world wide.

Useful Accessory: TUC Evaluation Board

25 mm

40 mm

4 mm

Contact

metraTec GmbH
Niels-Bohr-Str. 5
39106 Magdeburg
Germany

Tel.: +49 (0)391 251906-00
Fax: +49 (0)391 251906-01
Email: sales@metratec.com
Web: www.metratec.com

metraTec RFID Solutions