Cimetrics Inc

T6130
Internet of Things (IoT) to
Modbus Devices interface
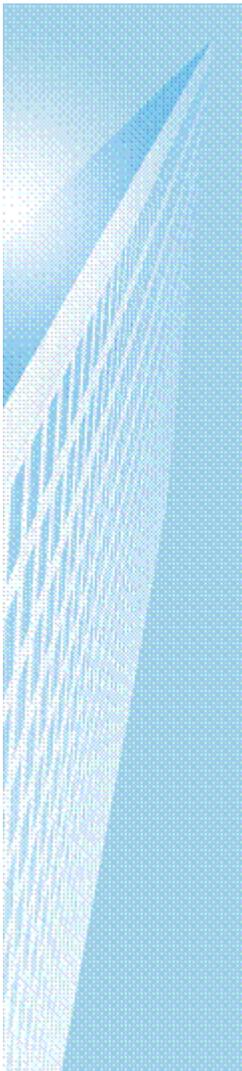
Quick Start Guide

October, 2015

Your T6130 device must be configured before use!

(NOTE: An Ethernet HUB or crossover cable is required)

Setup Configuration
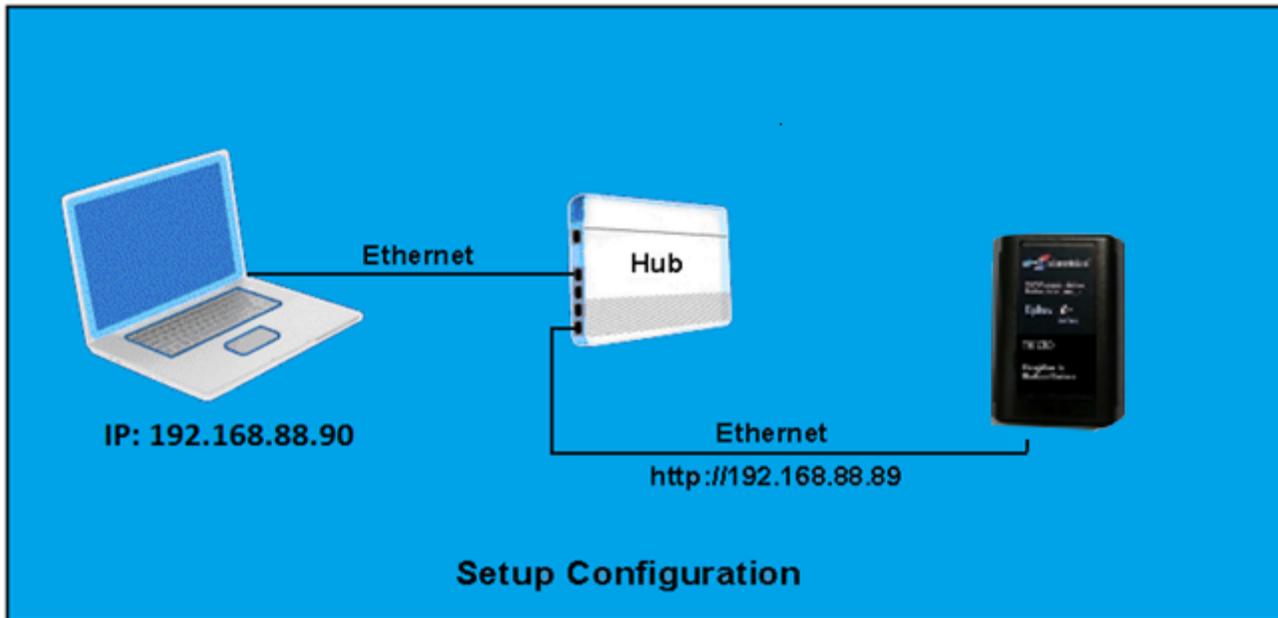
Access the T6130 configuration screen using your browser. Here is an explanation of how to do this:

Before you start working with T6130 please install on your Windows PC the Modbus Template Creator (comes with purchase of T6130) and create a template with the Modbus registers you want to map to ThingWorx.

Log in to an account on the ThingWorx server, and navigate to ThingWorx Composer. Create   a "Value Stream".

Create a new Application Key.

Connect the T6130 Ethernet connector to an Ethernet hub, and run another Ethernet cable from that hub to your laptop or PC. Make sure that the laptop or PC is the *only* other unit in this small LAN. NOTE: If you do not have a hub, you can use a "crossover cable" to connect between the T6130 and your laptop.

Set your PC's IP address to 192.168.88.90 with a subnet mask of 255.255.255.252.

Open your browser and enter the following URL: http://192.168.88.89

You will be prompted to login:

User=admin   password=admin

From within the browser interface you can change all settings in the entry fields to configure your interface.

Enter the Application Key you have created in the ThingWorx Composer into the ThingWorx Apllication Key field on the T6130's "ThingWorx configuration" page.

Log in to an account on the ThingWorx server, and navigate to ThingWorx Composer.

Create a new T6130 Thing, with an unique name Using Generic Thing. The "unique name" should be exact name of the T6130 device you want to send data to the ThingWorx. Bind created Value String to the Thing.

After the configurations in ThingWorx Composer and the T6130 have been saved, and the T6130 is restarted, the objects from the T6130 template will be uploaded into Composer, and are visible on the new T6130 Thing's page in Composer.

For improved access security, you should change your password from the default values. **Make sure you SAVE your new password!** When you press "Activate Configuration" and "confirm" then the configuration process is completed.

Now disconnect your laptop and connect the T6130 into your network.

Software Change Log

Version	Name	Release Date	Changes
v1.1-k3-C5210-1.01	T6130 firmware	10/27/2015	Initial Release
v1.1-k3-c5303-1.02	T6130 firmware	10/30/2015	Bug fixed. Fixed problems when an IP address was used in the ThingWorx url
V1.06	Template Creator	01/27/2013	Second public Release

Documentation Revision History

Version	Name	Release Date	Changes
V1.01	Quick Start	10/27/2015	Initial Release

Compatibility
T6130 firmware is web accessed from any browser.
Known good browsers include IE 11, Chrome 28.0, Firefox 35.0

T6130 firmware communicates with Thingworx 6.0.2

Modbus (1995-present) https://en.wikipedia.org/wiki/Modbus

Template Creator is a Windows executable. Know good Windows include 7, 8.x, untested with 10.

Known Issues/Limitations
ThingWorx must be prepared with a known Generic Thing with which the T6130 must register.
First registration of T6130 with ThingWorx server takes more than a few seconds to exchange information.
Authentication exchange is done out of band manually.
Currently all matters of permanence, privilege and visibility are handled manually within ThingWorx.