

This Quick Start Guide is designed to familiarize the user with the configuration of the digital outputs on the DTS 310 power meter using DTS Config. These instructions are given using the Windows 7 OS.

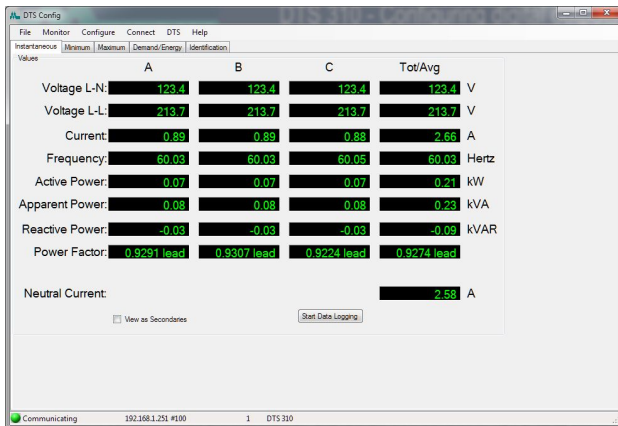
## 1. Connecting the DTS 310 to DTS Config

- The configuration of the DTS 310 to the software tool DTS Config will be done through the Modbus RS-485 or TCP port depending on the DTS 310 model purchased
- Further details can be found in the DTS 310 Quick Start Guide

## 2. Installation and Use of DTS Config Monitoring and Configuration Software

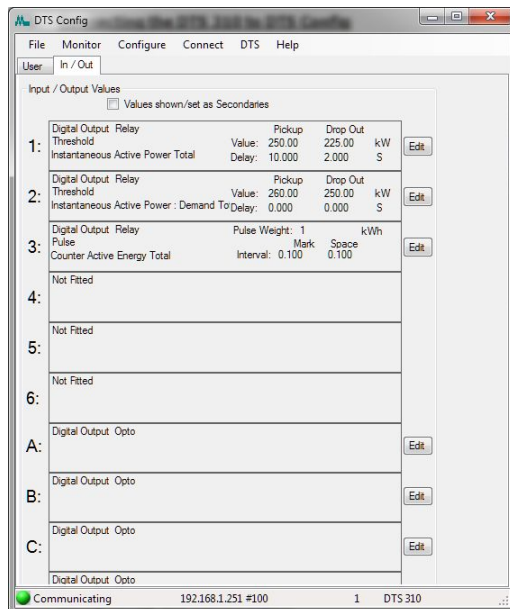
- **DTS Config** is a program **required** to configure the **Communications Settings** of the DTS meters from a local PC or across the LAN.
- Download the latest version of **DTS Config** from <http://measurlogic.com/software.html#dl>
- Run the **DTSConfigSetup** file and follow the instructions on the screen to complete the installation process.
- Run **DTS Config** (Default: C:\Program Files\Measurlogic\DTS Config) and connect to the desired unit as per **Section 3** with the **Connect** button.
- After establishing an active connection with the **Connect** button, **Communications Settings** can be modified via the **Configure** page.

## 3. Monitoring real time data from the DTS 310

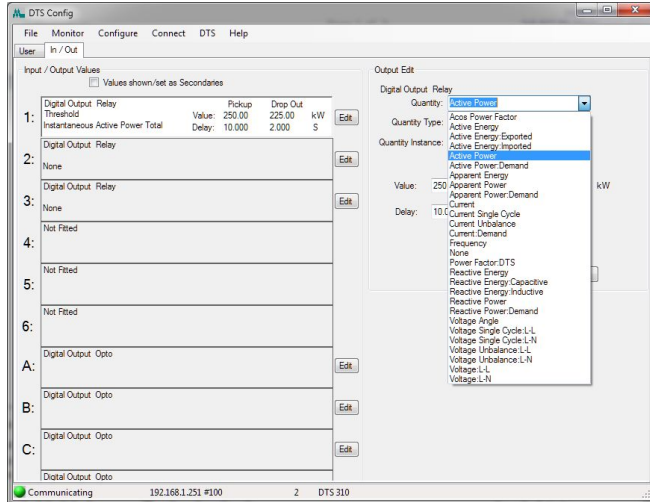


- Once communications have been established the real-time values being measured by the DTS 310 will be visible on the **Instantaneous Monitor** tab.
- Minimum, Maximum, Energy and Demand values are also available on different tabs

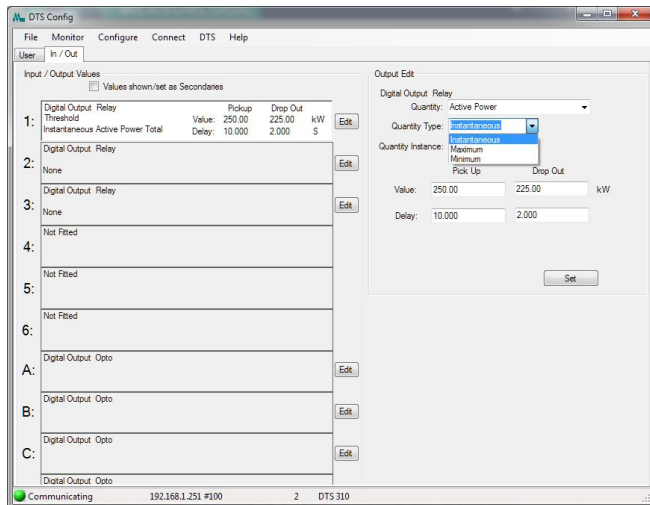
## 4. Configuring the digital outputs



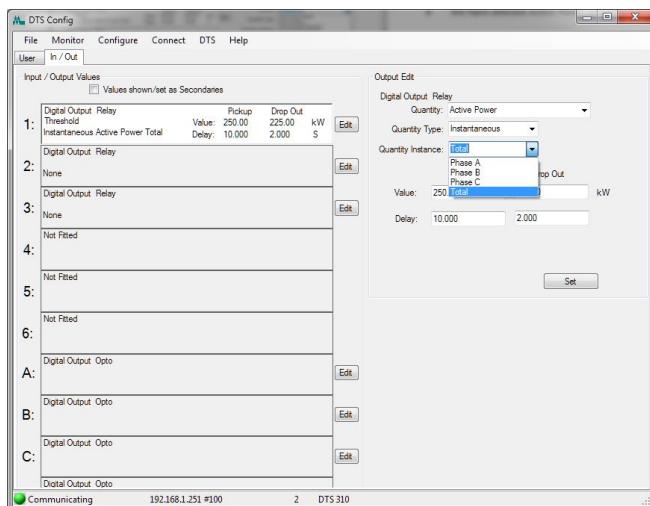
- From the **Configure** Menu select the **In/Out** tab.
- The configuration panel will show the number of digital outputs physically loaded into the DTS 310. These can now be configured / mapped as a energy pulse output or as a trigger level.
- We will now configure the outputs as trigger levels
- The screen capture shows that there are 3 x digital outputs fitted to the connected DTS 310
- They already are mapped to various parameters. We will show how these can be user configured to match any particular application



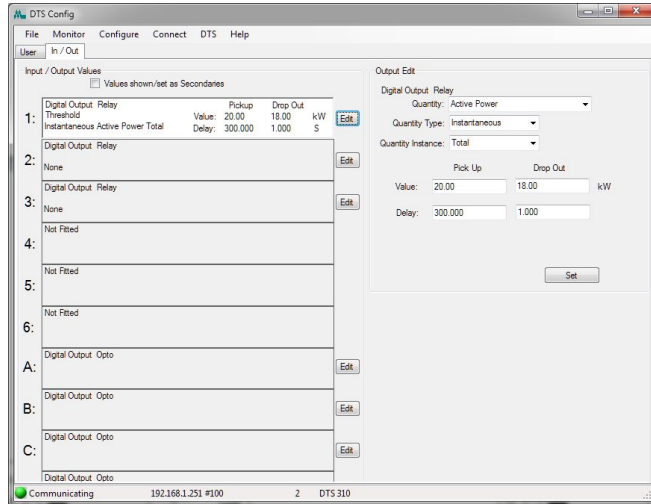
- We will configure Digital Output 1 first.
- There are many parameters that can be mapped to this digital output. A list is shown.
- We have selected Active Power as the trigger variable



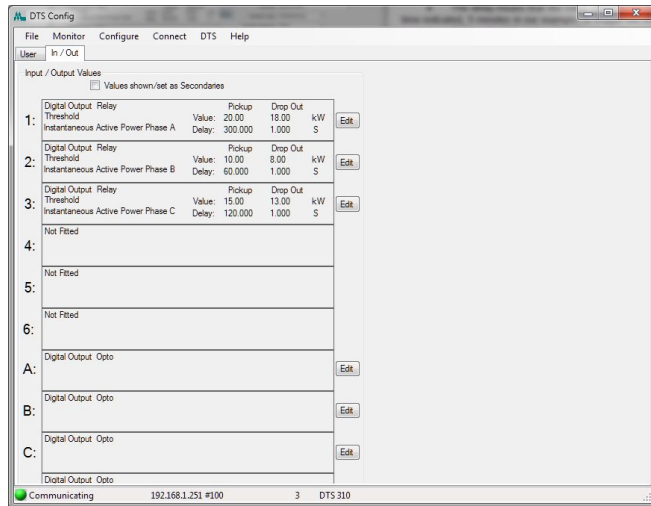
- You can then select "Instantaneous", "Maximum" or "Minimum" value of Active Power



- You can then select "Phase A", "Phase B", "Phase C" or "Total - 3 phase"
- If the load is true single phase 2 wire it is possible to use 1 x DTS 310 to measure 3 single phase loads and map each of the 3 x digital outputs to a different trigger point by selecting phase A, phase B or phase C respectively.



- We have selected to map Digital output 1 to 3 phase Active Power – Instantaneous
- The trigger value is 20kW with a delay of 300 seconds (5 minutes)
- The delay means that the value needs to be 20kW or above for the time indicated, 5 minutes in our example, to trigger the digital output
- If the value falls below the 20kW level the delay timer will reset and start counting from zero.
- The drop off value can be set to any value below the pick value. We chose a value of 18kW with a delay of 1 second
- A similar procedure can be followed to set digital outputs 2 and 3.



- Here is a configuration using the 3 x digital outputs mapped to the 3 single phase loads designated Phase A, Phase B and Phase C
- Digital Output 1 is set to trigger at 20kW with a delay of 5 minutes
- Digital Output 2 is set to trigger at 10kW with a delay of 1 minutes
- Digital Output 3 is set to trigger at 15kW with a delay of 2 minutes

## 5. Saving meter templates

- Any configuration set in the meter can be saved as a Meter template
- This allows the same configuration to be downloaded to multiple meters making for easy configuration
- Changes can be made to any template and then saved under a different name.

*If there are any questions please contact Measurlogic Inc.:*

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