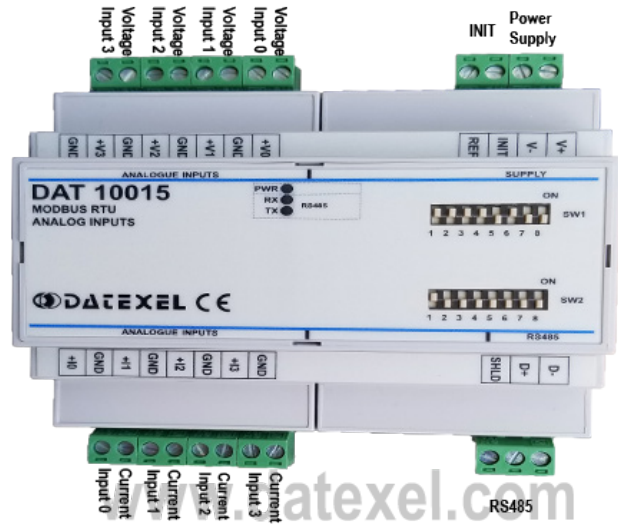
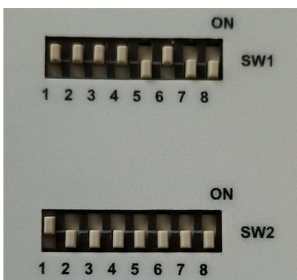


# DATATEXEL LLC

## DAT10015 Voltage and Current to Modbus RTU

The DAT10015 can be set up with DIP Switches or Software.

1. SW1, set 1,2,3,4 and 6 to the ON position.
2. SW2, set 1 to the ON position.
3. This DIP Switch setting is RTU, Parity None, Baud rate 38400.



1. Connect 24 Vdc to V+ and V-.
2. Connect RS485 to D+ and D-.
3. Connect a Voltage between 0-10Vdc on Voltage Input 0 and a Current on Current Input 0.
4. Power up the DAT10015 Modbus RTU Voltage and Current input Slave.

It is advisable to use the DAT3580 to connect the DAT10015 to the PC. The advantage of using the DAT3580 is that it will isolate your PC from the DAT10015. The DAT3580 options are USB, Ethernet and RS232. If the DAT3580USB version is used, install the USB drivers. If the DAT3580MBTCP or the DAT3580GW are used, make sure the Ethernet parameters are compatible with the net and transmission of data over port 502 is allowed.

### Set Up the PC.

1. Download the 3000-10000 Software from [www.datexel.com](http://www.datexel.com) download page.
2. Close all other software.
3. UnZIP the Modbus\_3000\_10000\_setup software.
4. Run the 3000-10000 software.
5. To start the software click the English version.

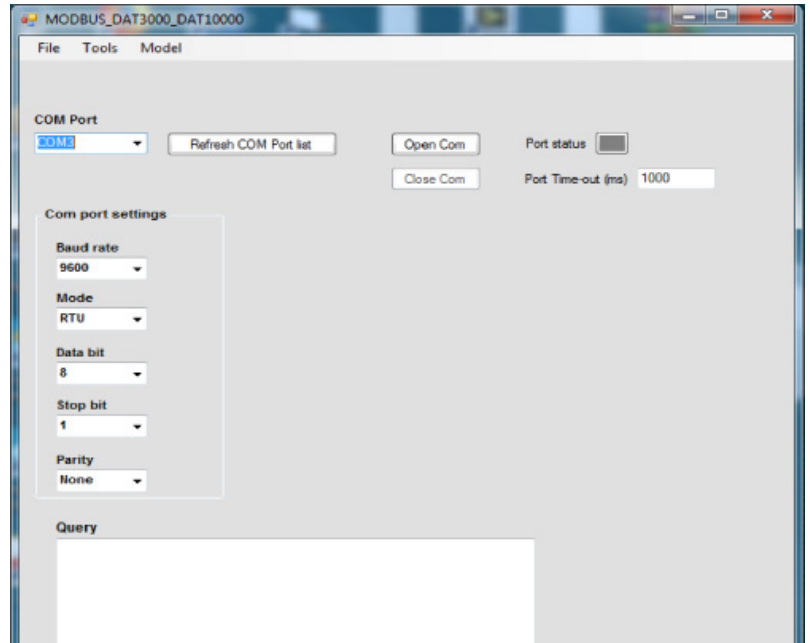
[www.datexel.com](http://www.datexel.com)

Call 561 779 5660 for technical support.



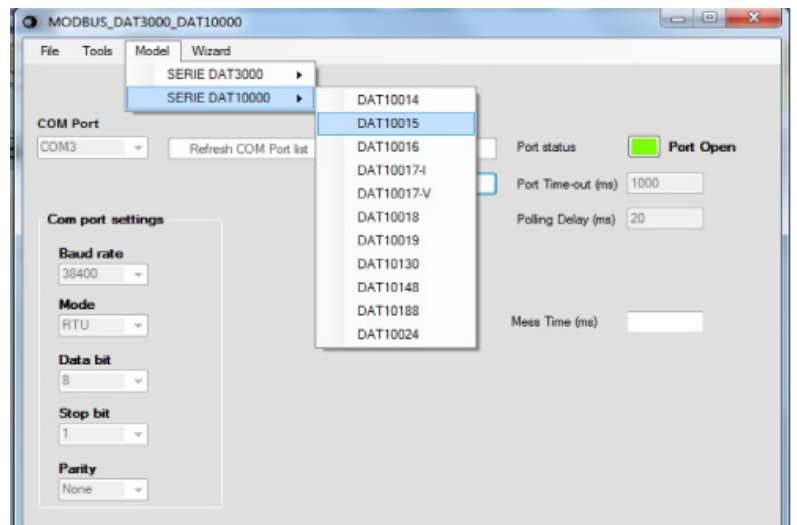
## Set Up Communication.

1. The software should automatically select the correct communication port. It is possible to override the communication port or refresh if you change the physical port.
2. Select the communication port setting as per the DIP Switches Baud rate 38400bps, RTU, Data Bit 8, Stop Bit1, Parity None. Click Open communication. The Port Status will change to green.



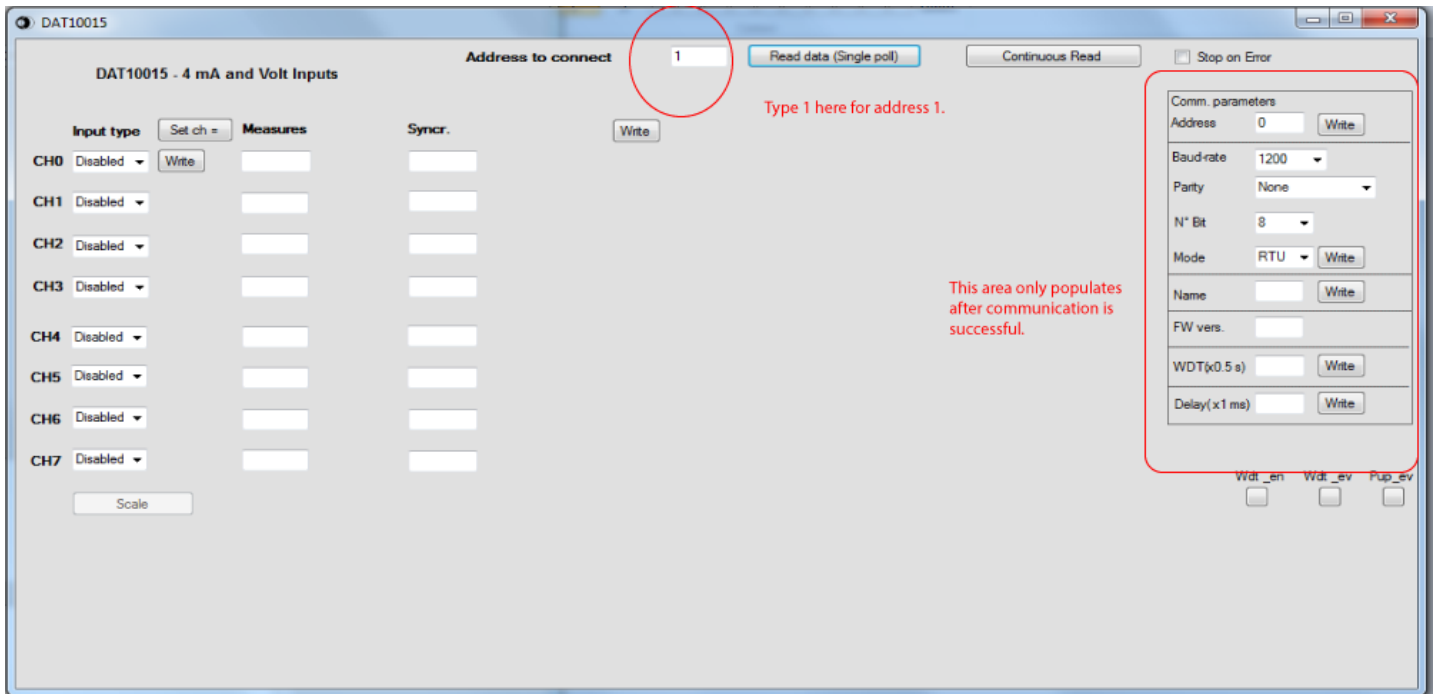
## Selecting the DAT10015 Voltage and Current to Modbus RTU.

1. The green light only indicates the port is open. Even if the settings are incorrect the light will turn green.
2. Select Model and the drop down navigation will appear.
3. Select DAT10015.



# Setting the address of the DAT10015 Modbus Slave.

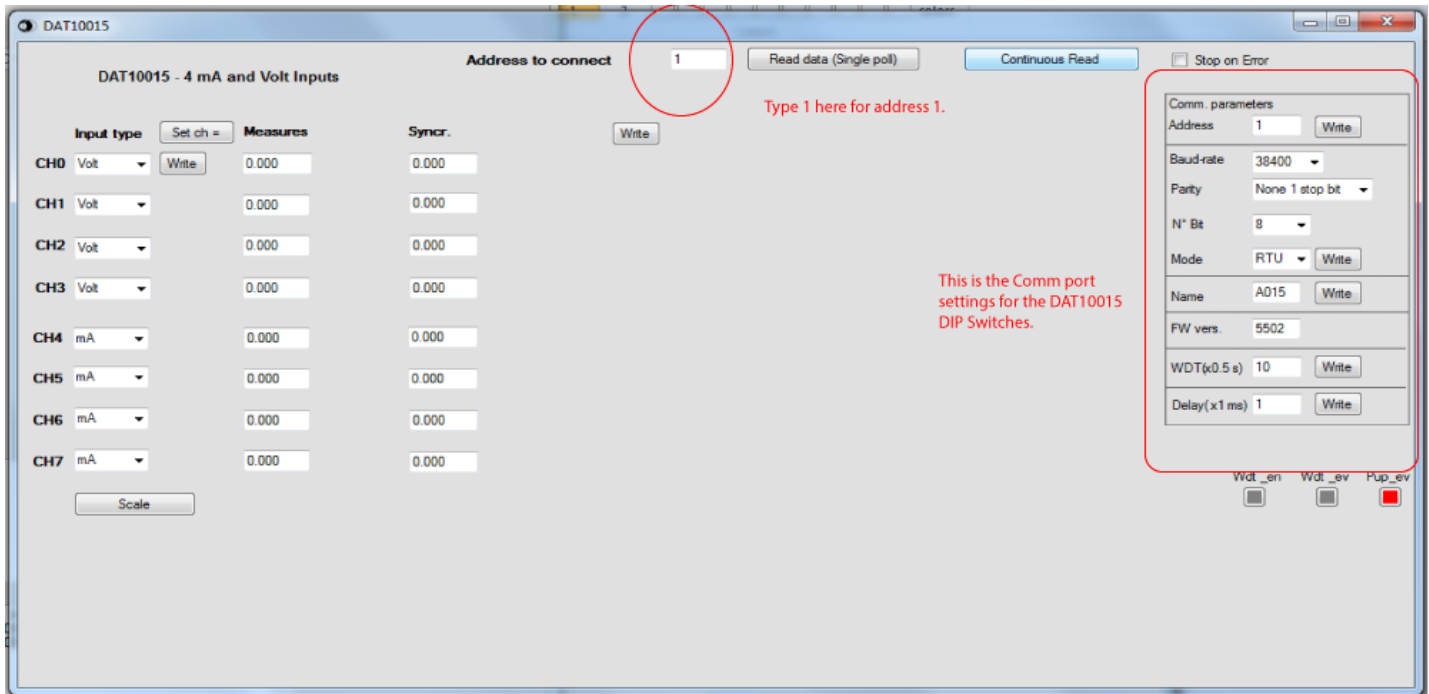
1. The address should be 1, if not change to 1, unless the DIP Switches have been changed.
2. Click “Read data” (Single poll).
3. The screen should now display the below screen.
4. If there is a function error, no CRC match, check Baud rate, RS485 connection or Modbus Slave Address.
5. This needs to be fixed before further progress.
6. Also, it is advisable to recheck the DIP Switch settings.



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# Setting the analog input on the DAT10015.

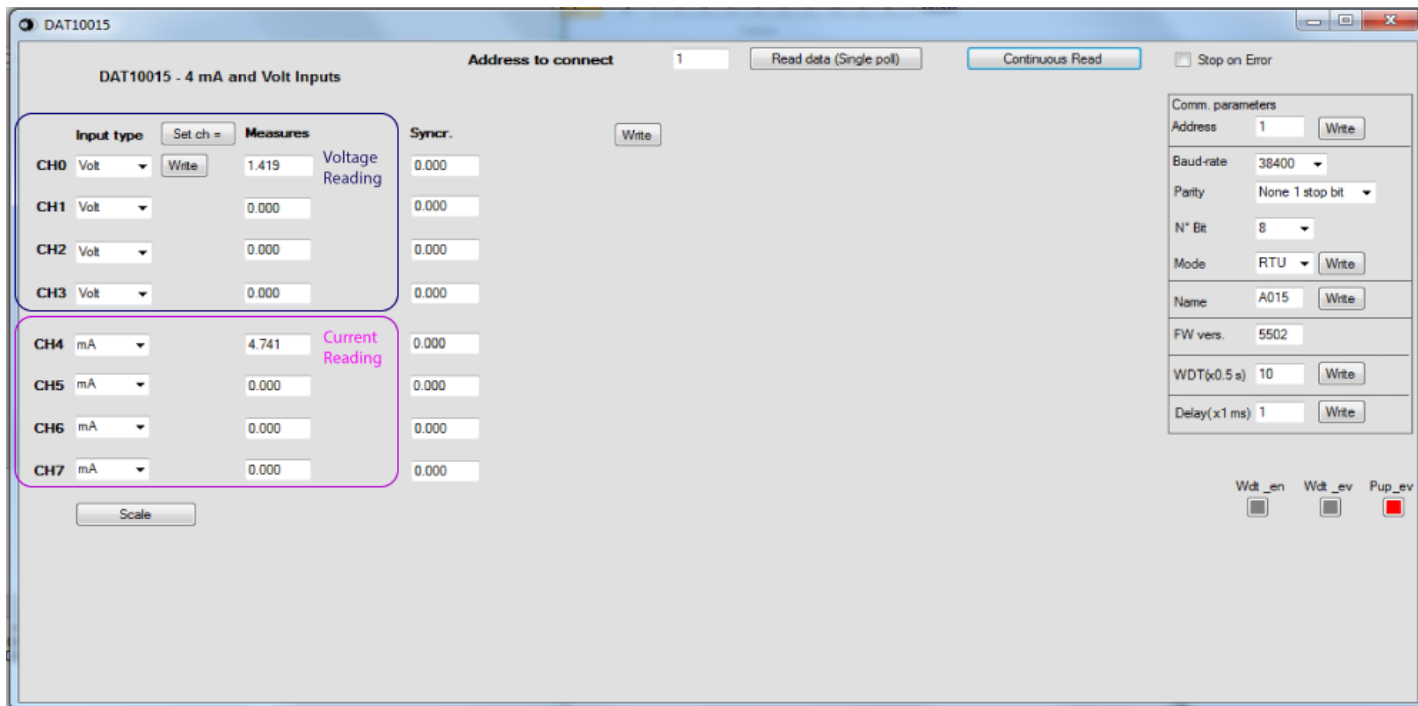
1. The DAT10015 has 4 dedicated channels to Voltage and Current hence you do not have to select the input type.
2. Click the Read data or Continuous Read button.



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# Reading the analog input on the DAT10015.

1. The measured value should now be displayed under the Measures label.



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# Explanation of Communication parameters for Modbus Slave DAT3024.

## Address

The actual address of the DAT10015 connected.

## Baud rate

The actual baud rate of the DAT10015 connected.

## Parity

The actual parity mode of the DAT10015 connected.

## N°Bit

The actual number of bit selection of the DAT10015 connected.

## Mode

The actual Modbus modality (RTU or ASCII) set for the DAT10015 connected

## Name

The string read from the DAT3024 of 4 ASCII characters used to name it example DAT10015.

## FW Vers

The firmware version read from the DAT10015.

## WTD (x0.5)

The watchdog time read from the DAT10015 is in steps of 0.5 seconds.

## Delay (x1 ms)

The delay time between the reception of a query and transmission of the response. Expressed as steps of 1 millisecond.

## Button Wdt\_en

Indicates if the bit to enable the watchdog time of the device has been set: red indicates the bit is set, grey indicates the bit is not set.

## Button Wdt\_ev

Indicates if the watchdog timer event has occurred: red if the event occurs, grey if the event has not occurred. This condition is also signaled by the blinking of the led "PWR" of the device and the safe state of the digital outputs.

## Button Pup\_ev

Indicates if the Power up event has occurred: red if the event has occurred, grey if the event has not occurred. This condition is also signaled by the power-up state of the digital outputs.

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