Techno Fittings TF - Modbus Client

#### **TF Modbus Client User Manual**

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#### 1 – Software info and requirements

**TF Modbus Client** is a Modbus Client on TCP/IP compatible with all Techno Fittings Modbus based systems (it support the Modbus function code 04).



The software can acquire automatically the Modbus configuration by .sic files or on the fly from the Sensor Connectivity DAD devices in just one click.

The software can show real-time values in a list and a configurable values chart.

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Rev 1.0.0

http://www.technofittings.com/

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The software require the .NET Framework 4.0 (or newer) installed, please check the Microsoft's web site to get a recent .NET Framework.

### 2 – How to configure the software

To configure the software open the "Settings" panel, by clicking on the top panel label.

ain (Chart View) Realtime Values (Variables List) Settings		
Variables List Modbus Zones		
Register Values Label	Value Type	Client settings
		Device IP 192.168.1.90
		Data Refresh 200 ms
		Chart Points 100
		Conn. Timeout 200 ms
		Save Settings
		Get configuration from SC-DAD

Fill all client settings

**Device IP:** The IP of the Modbus server on TCP/IP (the port is s by default to 502)

Data refresh: The delay between a full data refresh and a next one

Chart points: The number of points in the chart

**Connection timeout:** The TCP/IP connection timeout

**Enable the fastest data refresh:** Use this option to acquire data in the fastest way, if checked no delay will be applied.

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# When the configuration is done use the "Save Settings" button to apply and save settings.

The next step is to obtain a correct Modbus mapping, there are two ways:

- Getting the configuration on the fly from a Sensor Connectivity DAD, in this case to obtain the configuration just use the "Get configuration from SC-DAD" button from the Settings panel.
- 2) By selecting .sic files, in this case select RegisterTable and Dictionary .sic files.

ain (C	hart View) 🛛 Rea	altime Values (Variables List) Settings		
Varia	ables List Mc	odbus Zones		7
	Register	Values Label	Value Type 🚺 🛆	Client settings
•	1	DAD_RUNNING	INT16	Device IP 192.168.1.92
	2	DAD_FAULT	INT16	Data Refresh 200 m:
	3	DAD_RESERVED	INT16	Chart Points 100
	4	SLOT 1 - CH 1	INT16	Conn. Timosut 200
	5	SLOT 1 - CH 2	INT16	
	6	SLOT 1 - CH 3	T16	Enable the fastest data refresh
	7	SLOT 1 - CH 4	T16	Save Settings
	8	SLOT 1 - CH 5 (1) Configu	uration ok T16	
	9	SLOT 1 - CH 6	T16	
	10	SLOT 1 - CH 7 OK	T16	
	11	SLOT 1 - CH 8	T16	
	12	SLOT 2 - CH 1	INT16	
	13	SLOT 2 - CH 2	INT16	
	14	SLOT 2 - CH 3	INT16	
	15	SLOT 2 - CH 4	INT16	
	16	SLOT 2 - CH 5	INT16	Cot configuration from CC DAD
	17	SLOT 2 - CH 6	INT16	Get configuration from SC-DAD
	18	SLOT 2 - CH 7	INT16	Get configuration from .sic files
	10	SINT 2-CH 8	INT16	

(configuration client screen)

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#### 3 – Values Viewer

To enable the data-refresh use the **"Start"** button from the Main panel, then open the Values Viewer panel.

eaister	Values Label	Value	Value Type
	DAD_RUNNING	1	INT16
	DAD_FAULT	1	INT16
	DAD_RESERVED	2900	INT16
	SLOT 1 - CH 1	1692	INT16
	SLOT 1 - CH 2	4	INT16
	SLOT 1 - CH 3	3	INT16
	SLOT 1 - CH 4	4	INT16
	SLOT 1 - CH 5	-5	INT16
	SLOT 1 - CH 6	0	INT16
)	SLOT 1 - CH 7	0	INT16
	SLOT 1 - CH 8	4	INT16
2	SLOT 2 - CH 1	0	INT16
3	SLOT 2 - CH 2	0	INT16
ŧ	SLOT 2 - CH 3	4	INT16
5	SLOT 2 - CH 4	4	INT16
i	SLOT 2 - CH 5	0	INT16
7	SLOT 2 - CH 6	4	INT16
3	SLOT 2 - CH 7	4	INT16
)	SLOT 2 - CH 8	4	INT16

#### The list will contain 4 fields for each variable

**Register**: The 1st Modbus register of each variable **Values Label**: The label value of each variable **Value**: The real-time value

Value Type: The data type of the value

The list will be refreshed automatically at each data-refresh.

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#### 4 – Values Chart

ain (Chart View) Re	altime Values (Variable	es List) Settings			
alues Chart					
3000			Ĩ.		
2500					
2000					
1500		~~~~ <u>_</u>			
1000					
500					
0+	499	999	1499	1999	

A configurable values chart is available in the Main panel.

To **add/remove** a variable to/from the char:

- **1)** Select the variable to add/remove from the variable's combo box
- **2)** Use the Add/Remove button to add or remove a variable to/from the chart

The X line will contain all chart point, the Y line the variables value.

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### 5 – Document info

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