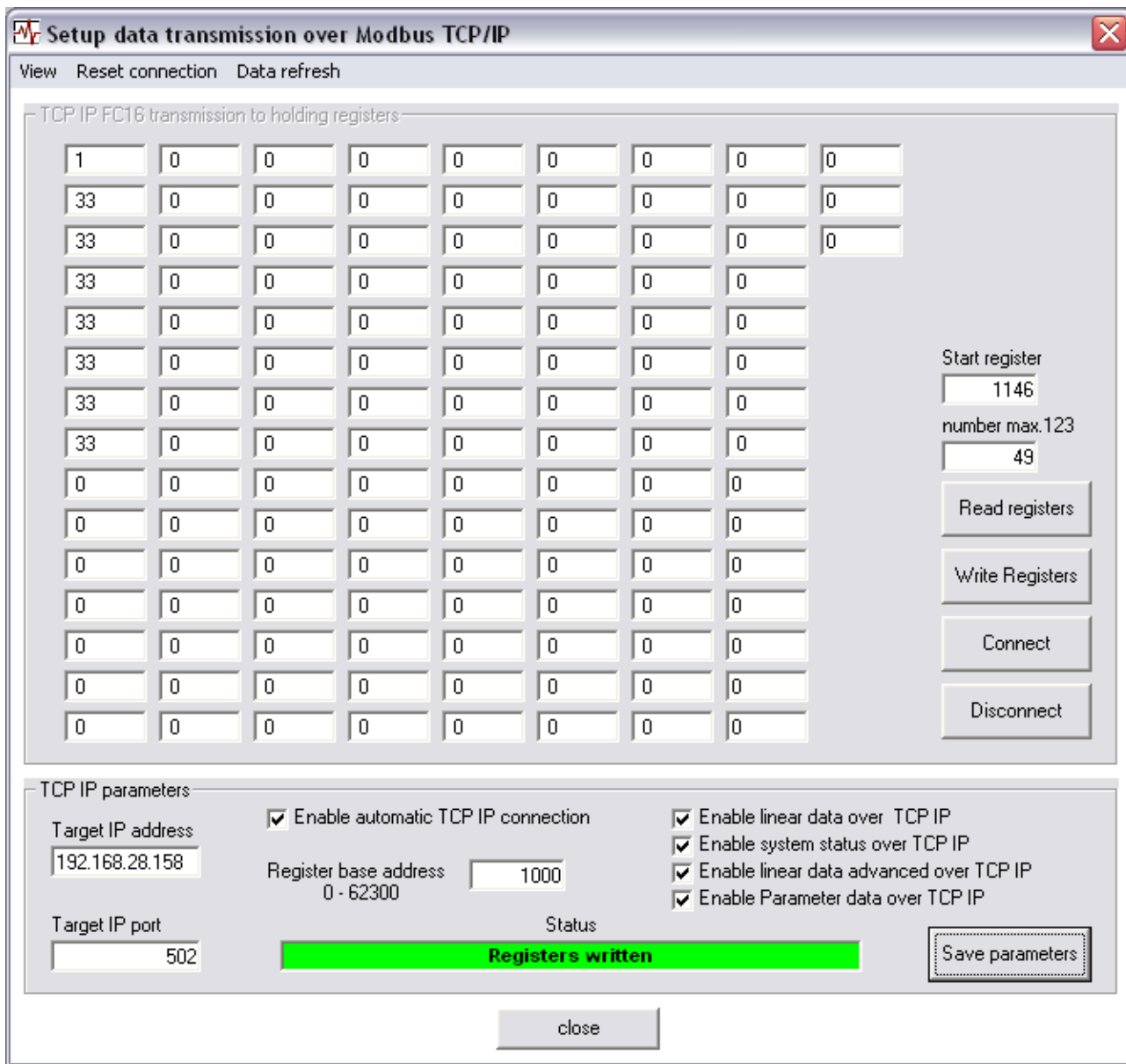


Register map Modbus TCP IP client of SiCOMS Data_Logger software V3.16

If enabled, the SiCOMS Data_Logger software sends all measured values and the system status as Modbus client to a designated Modbus Server. The target IP address and the target port (for Modbus TCP normally 502) can be adjusted in the TCP IP setup window.



Setup data transmission over Modbus TCP/IP

View Reset connection Data refresh

TCP IP FC16 transmission to holding registers

1	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Start register
1146
number max.123
49

Read registers

Write Registers

Connect

Disconnect

TCP IP parameters

Target IP address
192.168.28.158

Register base address
0 - 62300
1000

Target IP port
502

Status
Registers written

Save parameters

close

The data are transmitted via function code FC16 (write multiple registers) to the servers holding registers. Automatic connection and 4 kinds of data over Modbus TCP can be enabled (data transmission of linear data, system status, linear data advanced and parameter data). The register base address can be set up too. The register map looks as follows:

1. data transmission of linear data

transmission of 113 register contents :

- base + 0 number of the current SiCOMS system
- base + 1 - Oil mist concentration in percent of adjusted DC alarm level
- base + 16 - for 16 sensors
- base + 17 - Reference value of measuring track
- base + 32 for 16 sensors
- base + 33 - Oil Temperature in 1 degree
- base + 48 for 16 sensors
- base + 49 - Oil mist concentration in 1/10 mg/l
- base + 64 for 16 sensors
- base + 65 - Oil Temperature in 0.1 degree
- base + 80 for 16 sensors
- base + 81 - Temperature difference to average value in 0.1 degree
- base + 96 for 16 sensors
- base + 97 - Peak force in 1/ 10 G
- base + 112 for 16 sensors

2. data transmission of linear data advanced

transmission of 33 register contents :

- base + 113 number of the current SiCOMS system
- base + 114 - Opacity
- base + 129 for 16 sensors
- base + 130 - Transmission
- base + 145 for 16 sensors

3. data transmission of system status

transmission of 49 register contents :

base + 146 number of the current SiCOMS system

base + 147- Status 1

base + 162 for 16 sensors

value & H20 = 1 Ready relay on

value & H40 = 1 Pre-alarm relay on

value & H80 = 1 Shutdown relay on

base + 163 - Status 2

base + 178 for 16 sensors

base + 179 - Status 3

base + 184 for 16 sensors

3. data transmission of parameter data

transmission of 5 register contents :

base + 195 number of the current SiCOMS system

base + 196 number of the first sensor for temperature difference measurement

base + 197 Quantity of sensors for temperature difference measurement

base + 198 Temperature difference main alarm level

base + 199 Temperature difference pre-alarm level

For every more connected SiCOMS system the base address is additional increased by 210. This means for system number 2 the register map starts at base + 210 and ends at base + 409.

To check to modbus TCP/IP connection the data indicator software V1.50 can be used. This software acts then as Modbus TCP/IP server containing the holding registers. The delivered values of 6 BeCOMS and 4 SiCOMS systems can be visualized graphically.