



Power Monitor / Power Monitor 51A

Quick guide to set up a connection with the Power Monitor devices through the Weidmüller Serial/Ethernet Converter

1.1 Revision history

Version	Date	Change
0.0	11/2013	First edition
1.0	03/2015	Page 5, software Power Monitor Manager updated from version 1.10 to version 1.20

1.2 Contact address



Weidmüller Interface GmbH & Co. KG
PO Box 3030
32720 Detmold
Klingenbergstraße 16
32758 Detmold
Germany

Phone +49 (0) 5231 14-0
Fax +49 (0) 5231 14-2083
E-mail info@weidmueller.com
Internet www.weidmueller.com

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2. Introduction

This is a quick guide to set up a connection with the Power Monitor devices through the Weidmüller Serial/Ethernet Converter.

2.1 Copyright and trademark

- Weidmüller owns the copyright of this quick guide.
- No part of this quick guide may be reproduced in any form or by any means without prior permission.
- Modbus Protocol is a communication protocol that developed by Modicon Inc. for PLC. Modbus is the registered trademark of Schneider Electric.
- All other company names or product names that may be mentioned in this publication are trademarks or registered trademarks of their respective owners.

2.2 Types / article numbers

This quick guide covers the following product types / article numbers

Power Monitor	1423550000
Power Monitor 51A	1470260000

2.3 Requirements

Please set up the Serial/Ethernet Converter as described in the related installation guide.

Software

- Install the enclosed software Power Monitor Manager, version 1.20 and S/E-Converter Administrator.
- Power Monitor software needs the Microsoft .NET Framework 4.0 to run.

Wiring

Connect the Power Monitor and the Serial/Ethernet Converter via the Modbus RTU interface. Use the connection table below.

Power Monitor	Serial/Ethernet Converter
Pin 8	Pin 5
Pin 9	Pin 3
Pin 10	Pin 4

Terminal block Serial/Ethernet Converter



PIN	RS-485 2-wire	RS-422/ RS-485 4-wire
1	---	TxD+(B)
2	---	TxD-(A)
3	Data+(B)	RxD+(B)
4	Data-(A)	RxD-(A)
5	GND	GND

Terminal block Power Monitor

Terminal number	1	2	3	4	5	6	7	8	9	10
	L+	N-	V1	V2	V3	Vn	NC	GND	D+	D-
Function	AUX (Power supply)		Measured voltage input				–	RS485		

Ethernet connection

- Connect the Serial/Ethernet Converter to your local ethernet or directly to your computing device via an RJ45 cable.
- Make sure you are in the same IP range as the Serial/Ethernet Converter.
- The default IP of the Serial/Ethernet Converter is 192.168.1.110.

Others

- Make sure you have administrator rights on the computer.
- Make sure computer and Serial/Ethernet Converter are in the same network sector.

3. Configuring Serial/Ethernet Converter

STEP 1

Start S/E-Converter Administrator.

STEP 2

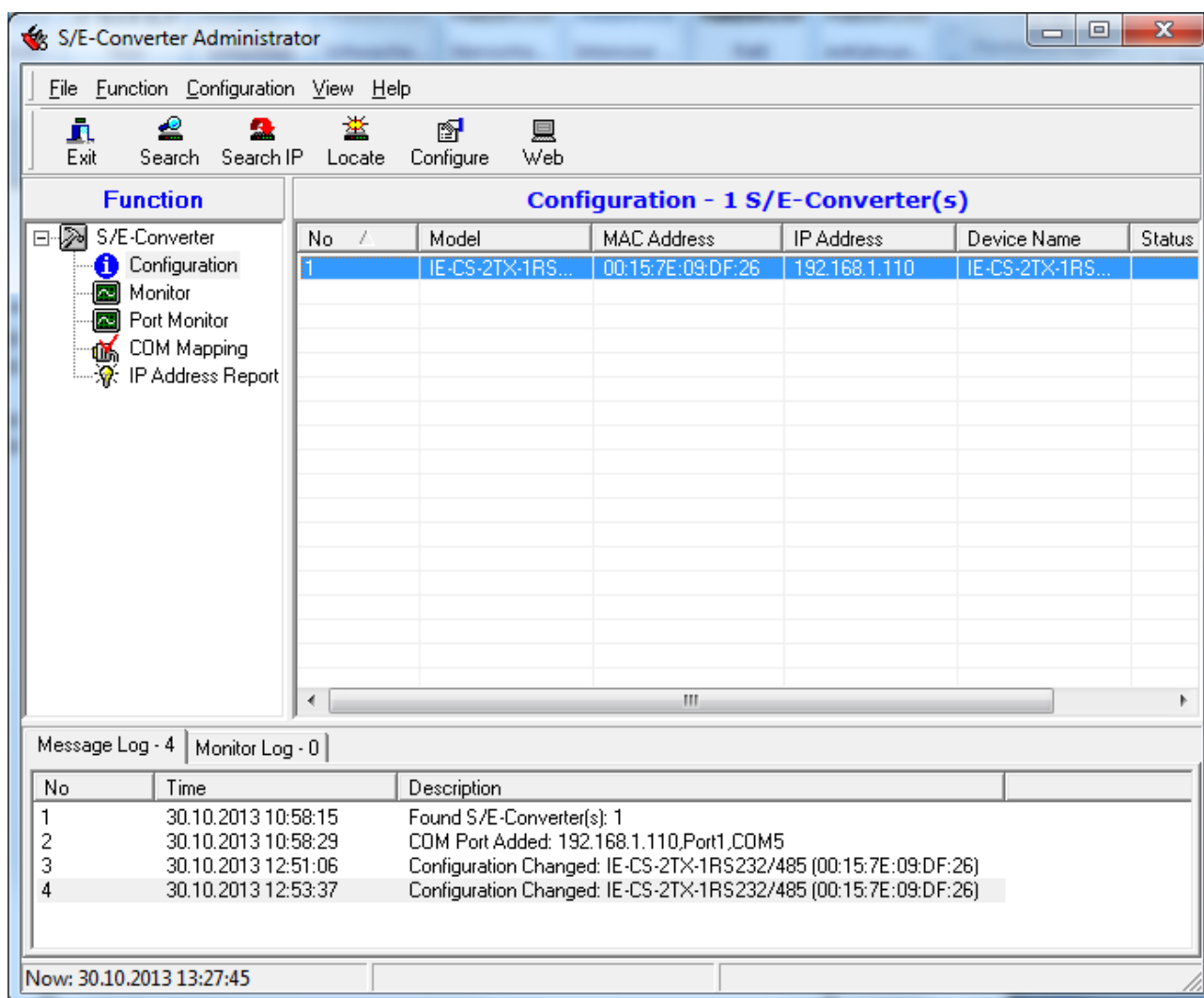
Click on [Search]. If you have connected the Serial/Ethernet Converter properly to your network the software will find the device.

STEP 3

Mark the device in the table.

STEP 4

Click on [Configure].



STEP 5

Click on [Network] to see the network configuration. Click the [Modify] check box to modify the configuration if needed.

Configuration

Information

Model Name
IE-CS-2TX-1RS232/48

MAC Address
00:15:7E:09:DF:26

Serial Number
6451

Firmware Version
Ver 1.0.4

System Uptime
0 days, 00h:40m:39s

Accessible IPs | **Auto Warning** | **IP Address Report** | **Password**

Basic | **Network** | **Serial** | **Operating Mode**

☐ **Modify**

IP Address: 192.168.1.110

☐ **Modify**

Netmask: 255.255.255.0

Gateway:

IP Configuration: Static

DNS Server 1:

DNS Server 2:

☐ **Modify**

☒ **Enable SNMP**

Community Name: public

Location:

Contact:

Click the "Modify" check box to modify configuration

☒ OK ☐ Cancel

STEP 6

Click on the [Serial] tab.

STEP 7

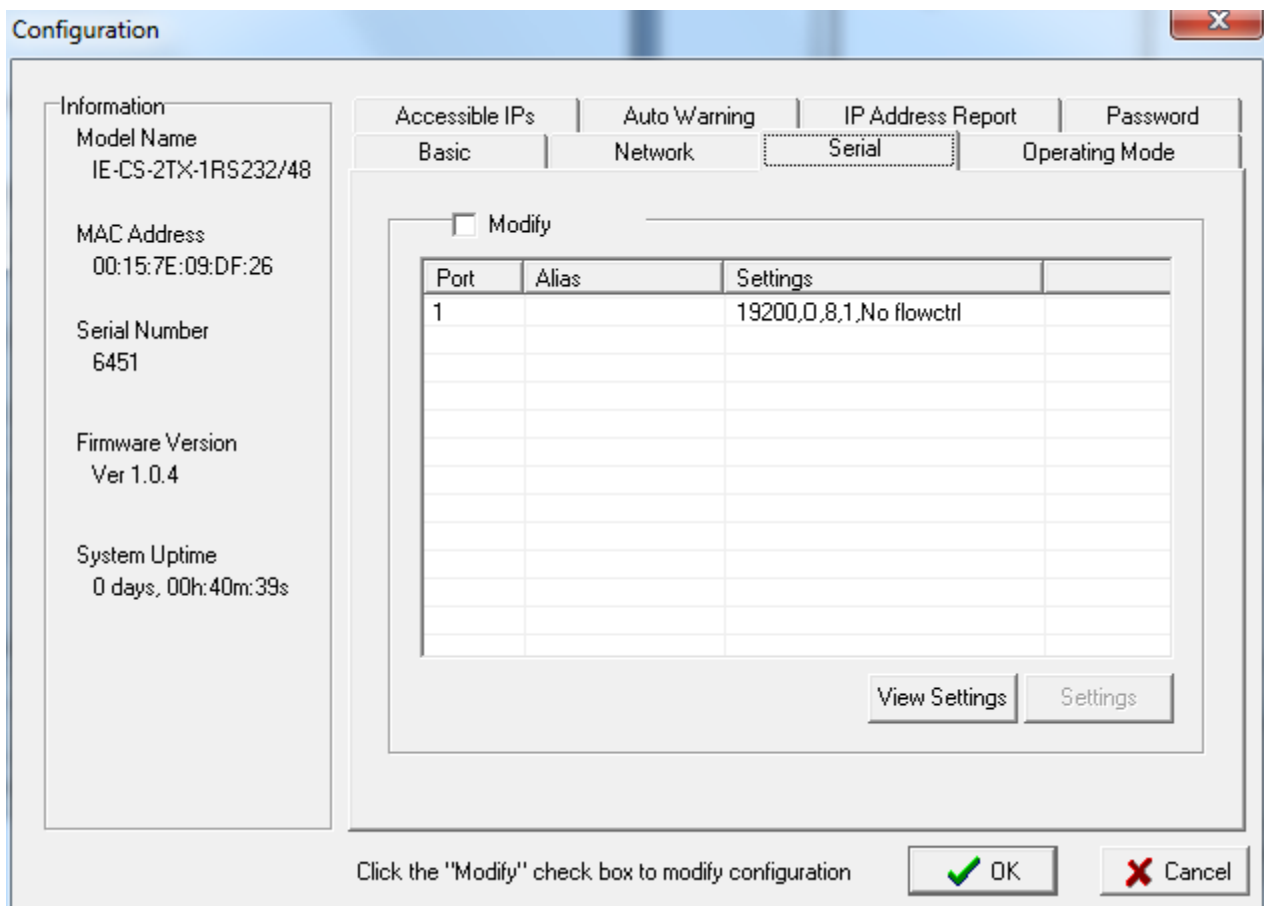
Click the [Modify] check box.

STEP 8

Mark the device in the table.

STEP 9

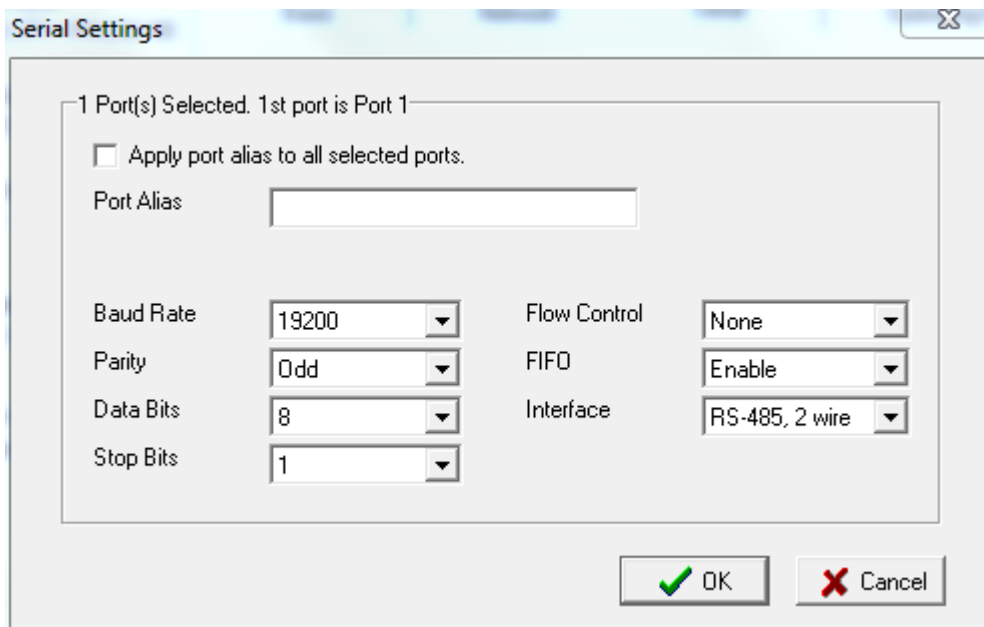
Click on the [Settings] button.



STEP 10

Set the parameters as follows:

- Baud Rate: 19200
- Parity: Odd
- Data Bits: 8
- Stop Bits: 1
- Flow Control: None
- FIFO: Enable
- Interface: RS-485, 2 wire



The image shows a 'Serial Settings' dialog box. At the top, it says '1 Port(s) Selected. 1st port is Port 1'. Below this is a checkbox labeled 'Apply port alias to all selected ports.' which is unchecked. Underneath is a 'Port Alias' text field. The main area contains two columns of settings, each with a label and a dropdown menu. The left column includes 'Baud Rate' (19200), 'Parity' (Odd), 'Data Bits' (8), and 'Stop Bits' (1). The right column includes 'Flow Control' (None), 'FIFO' (Enable), and 'Interface' (RS-485, 2 wire). At the bottom right are 'OK' and 'Cancel' buttons with green and red checkmarks respectively.

**NOTICE**

All values must be equal to the values in the Power Monitor.

STEP 11

Confirm by clicking on [OK].

STEP 12 Click the [Operating Mode] tab.

STEP 13 Click the [Modify] check box.

STEP 14 Mark the first row in the table.

STEP 15 Click on [Settings] and set [Operating Mode] to “Real COM Mode”.

Operating Mode

1 Port(s) Selected. 1st port is Port 1

Operating Mode: Real COM Mode

Real COM

Max. Connection: 1

Misc (Optional)

TCP Alive Check Timeout: 7 (0-99 min)

☐ Allow Driver Control

☐ Ignore Jammed IP

Data Packing (Optional)

☐ Delimiter 1: 00 (0-ff, Hex)

☐ Delimiter 2: 00 (0-ff, Hex)

Force Tx Timeout: 0 (0-65535 ms)

Packing Length: 0 (0-1024 bytes)

Delimiter Process: Do Nothing

OK Cancel

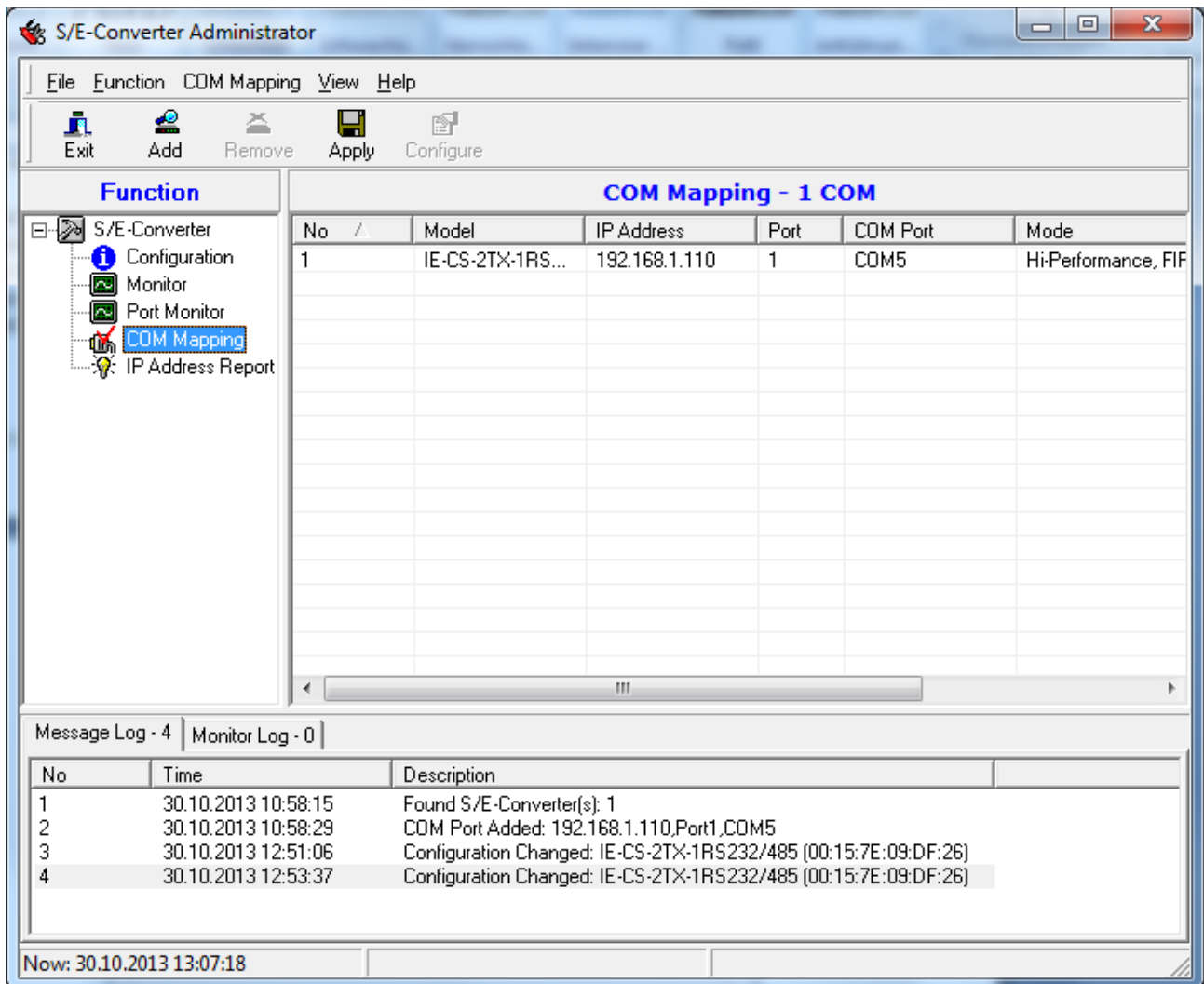
STEP 16 Confirm by clicking on [OK].

STEP 17

Click on [COM Mapping].

STEP 18

Click on [Add], check the box and confirm by clicking on [OK].



Add S/E-Converter

Select From List

Rescan

Select All

Clear All

No	Model	MAC Address	IP Address
☒ 1	IE-CS-2TX-1RS...	00:15:7E:09:DF:26	192.168.1.110

☐ Input Manually

IP Address

Model

Ports

IE-CS-2TX-1RS232/485

1 Port(s)

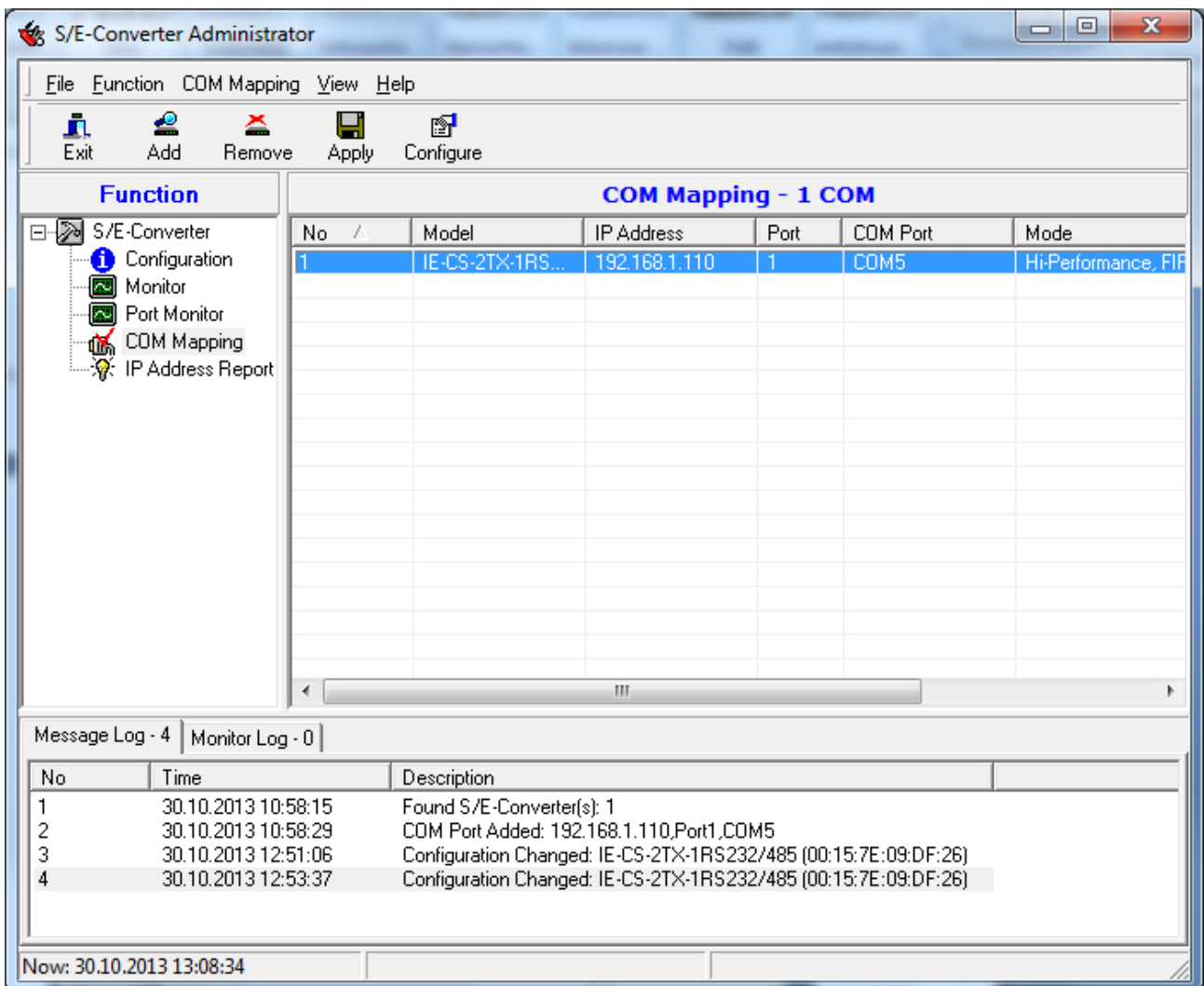
OK

Cancel

STEP 19 Click on the upper row in the main window.

STEP 20 Click on [Configure].

STEP 21 Select a COM Port.



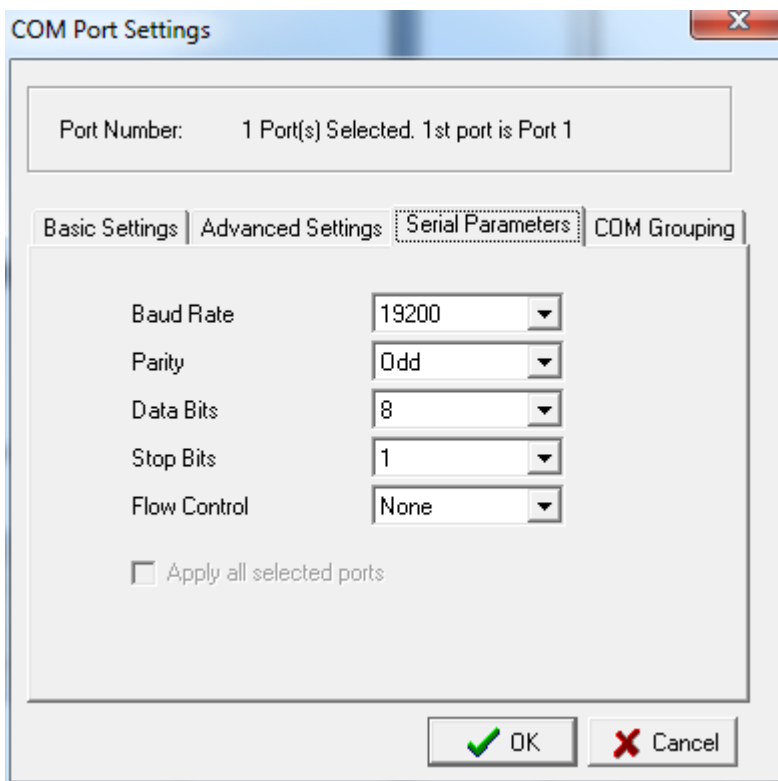
STEP 22

Click on the [Serial Parameters] tab.

STEP 23

Set the parameters to the same values as in step 10 and on the Power Monitor, i.e.

- Baud Rate: 19200
- Parity: Odd
- Data Bits: 8
- Stop Bits: 1
- Flow Control: None



NOTICE

All values must be equal to the values in the Power Monitor.

STEP 24

Confirm by clicking on [OK].

STEP 25

Click on [Apply] in the main window.

4. Configuring Power Monitor

Firstly, please change the protocol from MEWTOCOL to MODBUS in the Power Monitor and set communication parameters as follows:

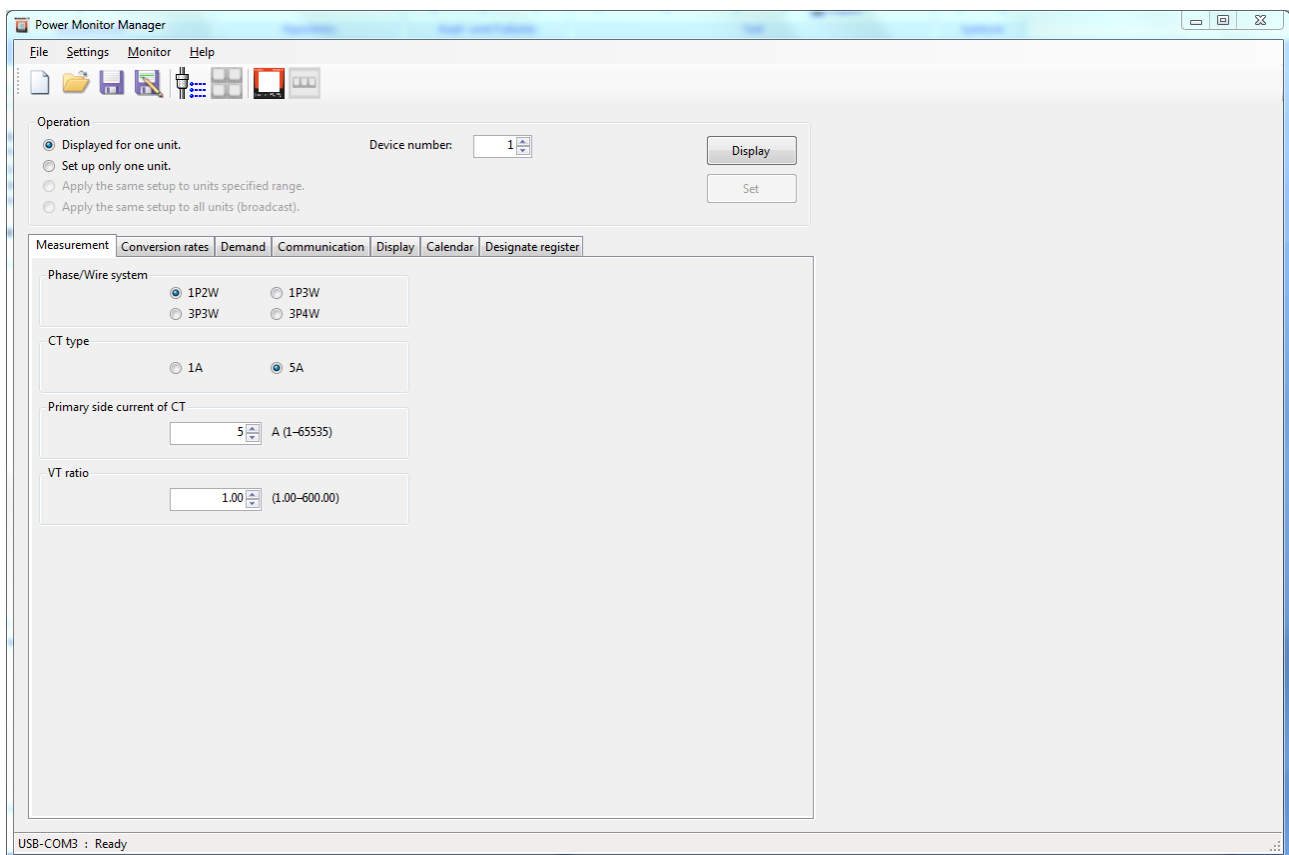
- Baud Rate: 19200
- Parity: Odd
- Data Bits: 8
- Stop Bits: 1

STEP 26

Start the Weidmüller Power Monitor Manager.

STEP 27

Under [Settings] select [Communication setup].



STEP 28 Set [Network] to "RS232C".

STEP 29 Set [Communication port] to the same port as described in step 22.

STEP 30 Set the other parameters to the same values as in step 10 and on the Power Monitor:

- Baud Rate: 19200
- Parity: Odd
- Data Bits: 8
- Stop Bits: 1

Communication setup

Network: RS232C

RS232C

Communication port: COM5

Communication speed: 19200

Data length

☐ 7bit ☒ 8bit

Stop bit

☒ 1bit ☐ 2bit

Parity

☐ None ☒ Odd ☐ Even

Broadcast transmission interval

1000 msec

Communication time out: 1 sec

Communication retry: 1Time

OK Initialize Cancel

**NOTICE**

All values must be equal to the values in the Power Monitor.

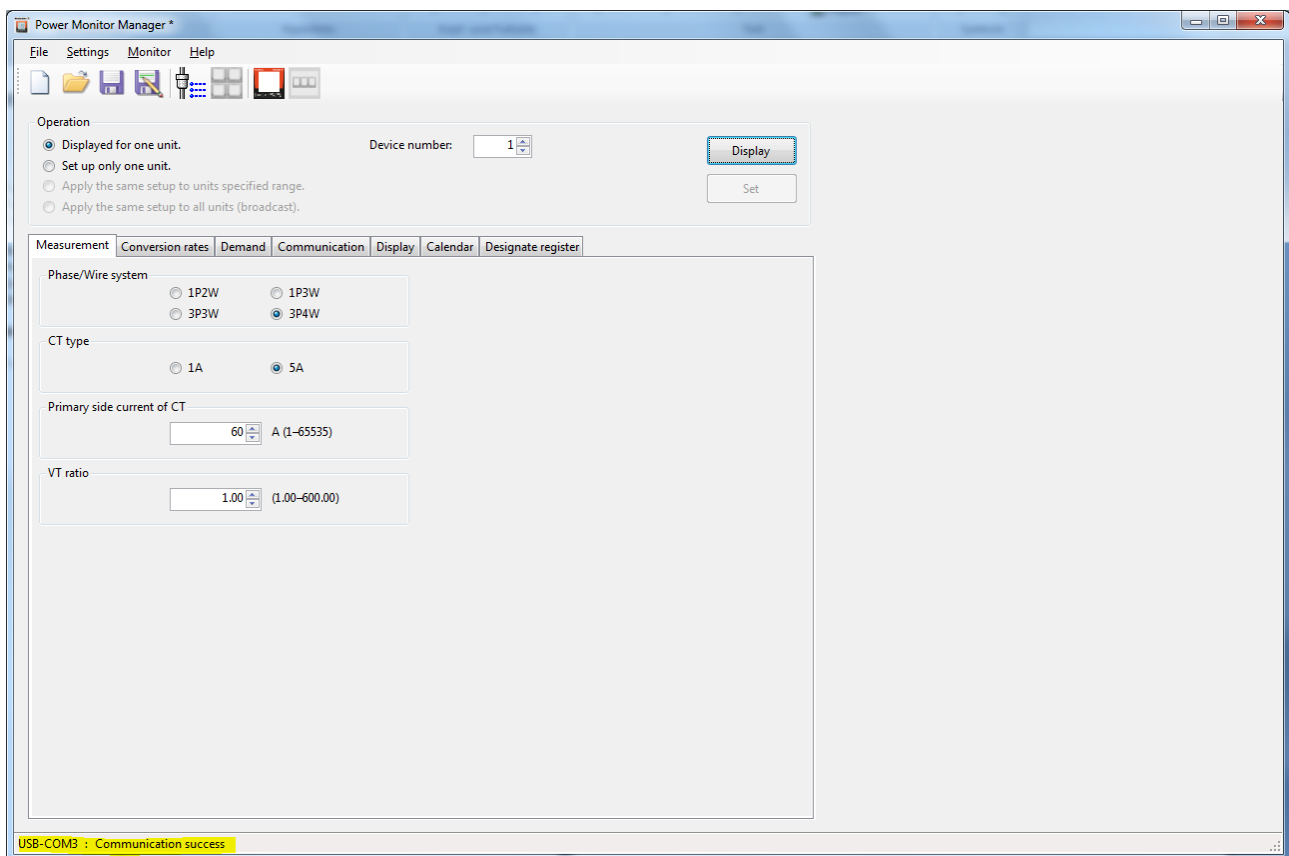
STEP 31

Confirm by clicking on [OK].

STEP 32

Click on [Display].

Now there must be a connection between the Power Monitor and the computer (see status on the bottom left “Communication success”).



www.weidmueller.com

Weidmüller Interface GmbH & Co. KG

PO Box 3030

32720 Detmold

Klingenbergstraße 16

32758 Detmold

Germany

Phone +49 (0) 5231 14-0

Fax +49 (0) 5231 14-2083

E-mail info@weidmueller.com

Internet www.weidmueller.com

Order number:

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