USA
205 Westwood Ave
Long Branch, NJ 07740
1-877-742-TEST (8378)
Fax: (732) 222-7088
salesteam@Tequipment.NET

FLUKE ®

Instrument Security Procedures

Model:
Fluke 1760

Product Name:
Fluke 1760 Power Quality Recorder

Instrument Description:
Three-Phase Power Quality Recorder Topas

Memory Description:
The 1760 Power Quality Recorder has numerous internal non-volatile memory devices for holding instrument firmware and data:

- An internal Compact Flash memory card stores LINUX operating system, log files, application firmware, FPGA configuration, calibration constants, measurement setup data and application data files.
- An FPGA with on-chip flash memory for holding the configuration (optionally, if transient analysis is built in).
- A small EEPROM in each sensor stores the serial number, type of accessory and calibration constants.
- Industrial CPU board containing CPU boot firmware and memory for storing BIOS settings

Memory Cleaning Instructions:
1. Connect to the Fluke 1760 Power Quality Recorder using PQ_Analyze.
2. Use "Advanced Settings" in PQ_Analyze to delete measurement data stored in the internal Compact Flash card.
3. Reset network settings to default.

> *Note*
>
> *The Ethernet network configuration will be set to DHCP enabled. After accomplishing this instruction it is not possible to connect to the instrument in a LAN where fixed IP addresses are used. A peer-to-peer connection using the cross-over cable and a USB connection is still possible.*

4. Rename device to its default name.

For more information, detailed step-by-step procedures can be found on the following pages.

Memory Cleaning Limitations:

The LINUX operating system, application firmware, FPGA configuration in the internal Compact Flash memory card are factory programmed or updated during a firmware update, contain no user data, are not unique to the instrument, and cannot be cleaned.

The internal Compact Flash memory card contains application log files that cannot be cleaned. They save a limited rolling history of status and diagnostic information for the instrument for use by service personnel.

The instrument serial number and calibration constants that are stored on Compact Flash memory card cannot be modified by the user and cannot be cleaned.

The Fluke 1760 Power Quality Recorder does not provide secure erasure of memories/files. Consequently, it may be possible to recover data from the 1760 even after these memory cleaning instructions have been followed. In addition, some files that cannot be cleaned by this procedure, such as application log files, may contain Ethernet network addresses and other information that could conceivably be used to identify specific instruments, when and where they recorded data, and other potentially sensitive information.
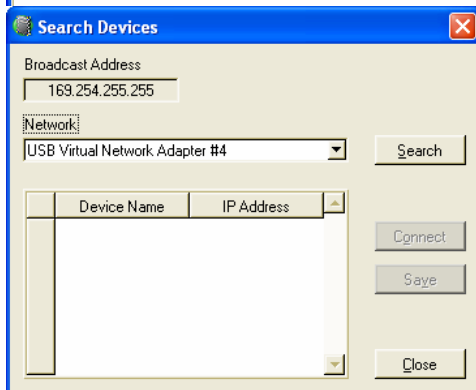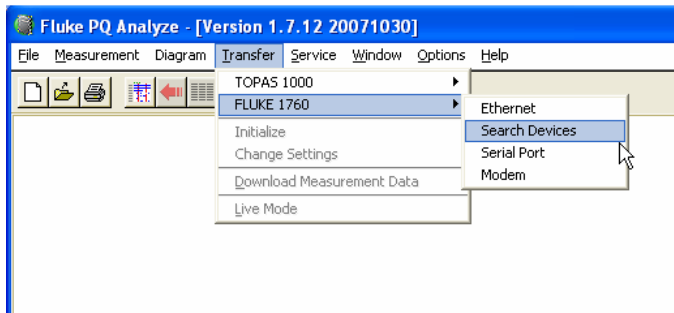
Detailed Memory Cleaning Instruction

1. Use the USB cable to establish a connection to the PC. Alternatively a connection to your LAN or a peer-to-peer LAN connection using the cross-over cable is also possible.
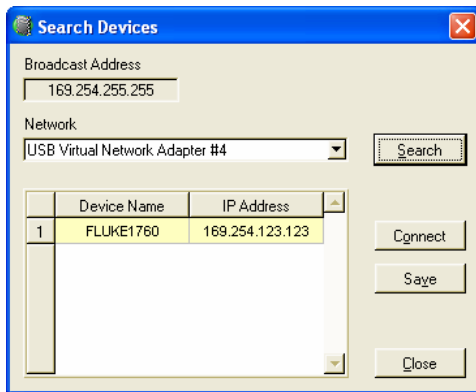2. Turn on the instrument.
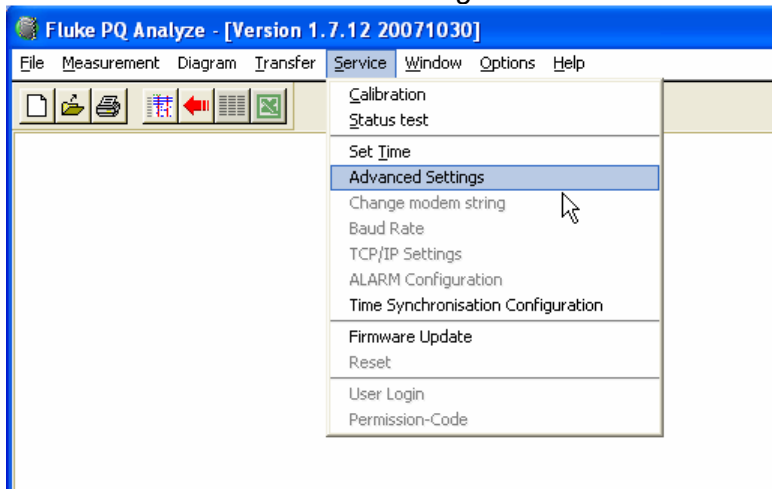3. Start software PQ_Analyze.
4. Connect to the instrument:
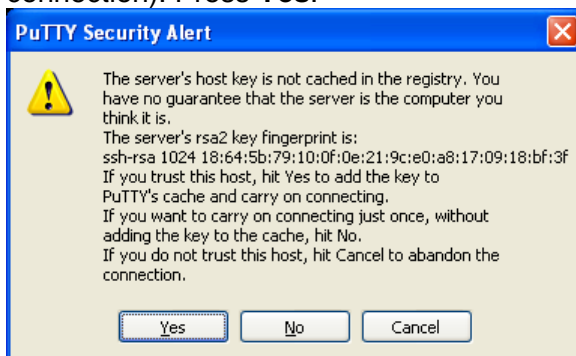   Use *Transfer>FLUKE 760>Search Devices*

5. Click the *Search* button.

6. Select instrument where the measurement data should be erased and click on *Connect*.
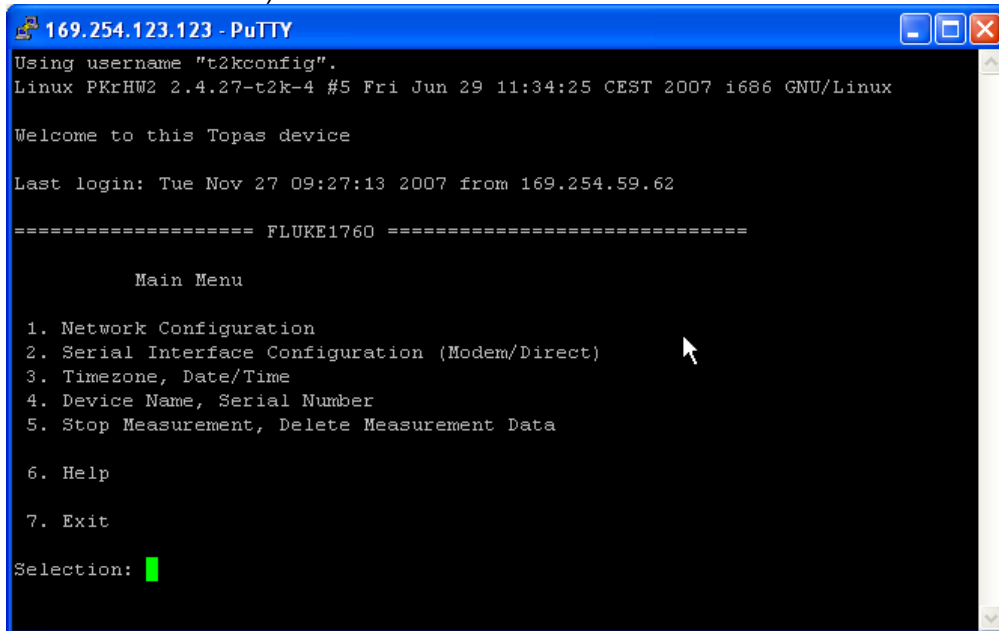
7. Click on: *Service>Advanced Settings*

8. The first time you do this a security message is displayed (verification of trusted connection). Press **Yes**.

Delete Measurement Data

1. In the configuration main window enter *5* ("5. Stop Measurement, Delete Measurement Data").

2. A warning appears that all recorded measurement data will be deleted.

3. Press *Y* (case insensitive).

4. After a few seconds the main window is shown again.
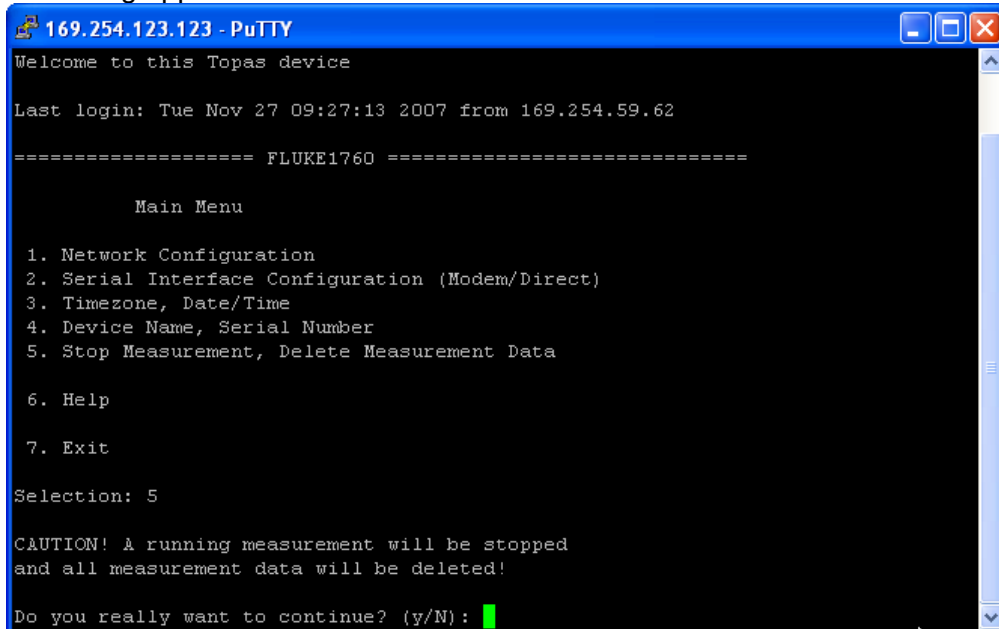
```
CAUTION! A running measurement will be stopped
and all measurement data will be deleted!

Do you really want to continue? (y/N): y
Shutting down measurement application (-> runlevel 2)
Delete all measurement data
Restarting measurement application (-> runlevel 3)

=================== FLUKE1760 ===============================

          Main Menu

 1. Network Configuration
 2. Serial Interface Configuration (Modem/Direct)
 3. Timezone, Date/Time
 4. Device Name, Serial Number
 5. Stop Measurement, Delete Measurement Data

 6. Help

 7. Exit

Selection:
```
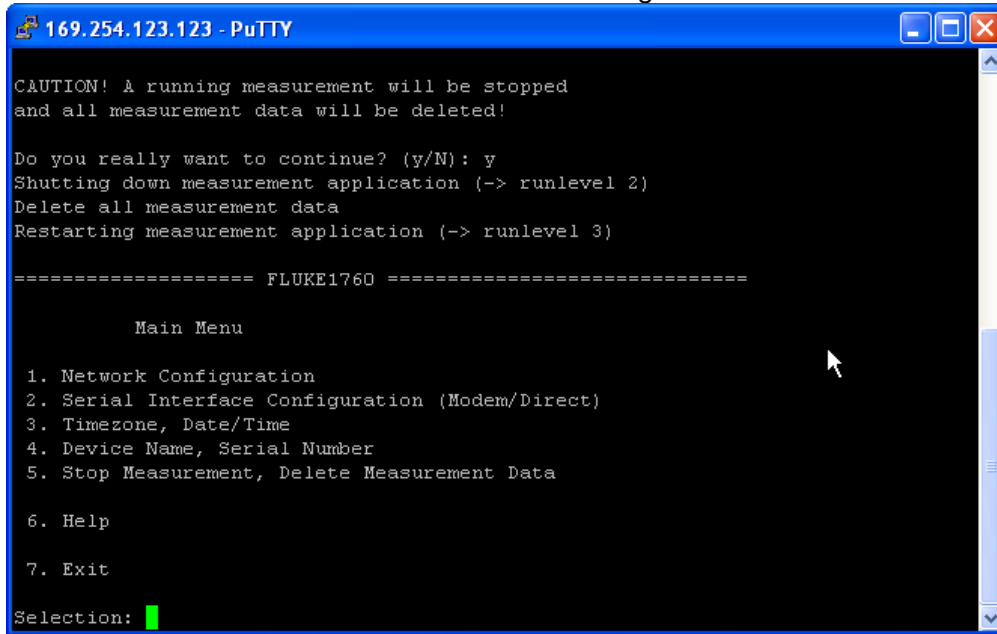
Restore Network Default Settings

1. Enter 1 (*1. Network Configuration*).

```
Using username "t2kconfig".
Linux PKrHW2 2.4.27-t2k-4 #5 Fri Jun 29 11:34:25 CEST 2007 i686 GNU/Linux

Welcome to this Topas device

Last login: Tue Nov 27 09:33:36 2007 from 169.254.59.62

=================== VN50122 ===============================

          Main Menu

 1. Network Configuration
 2. Serial Interface Configuration (Modem/Direct)
 3. Timezone, Date/Time
 4. Device Name, Serial Number
 5. Stop Measurement, Delete Measurement Data

 6. Help

 7. Exit

Selection:
```
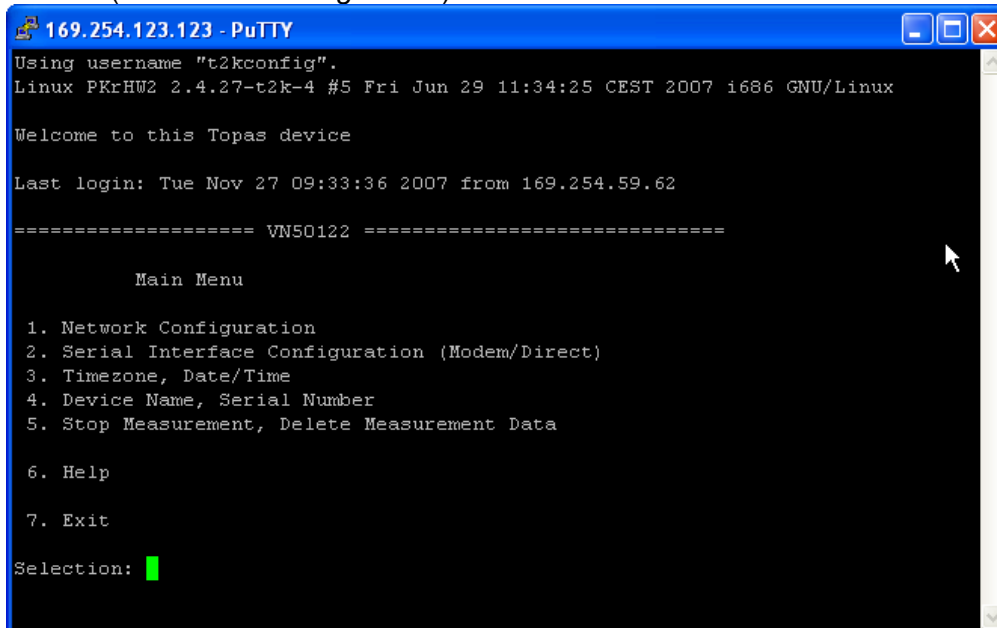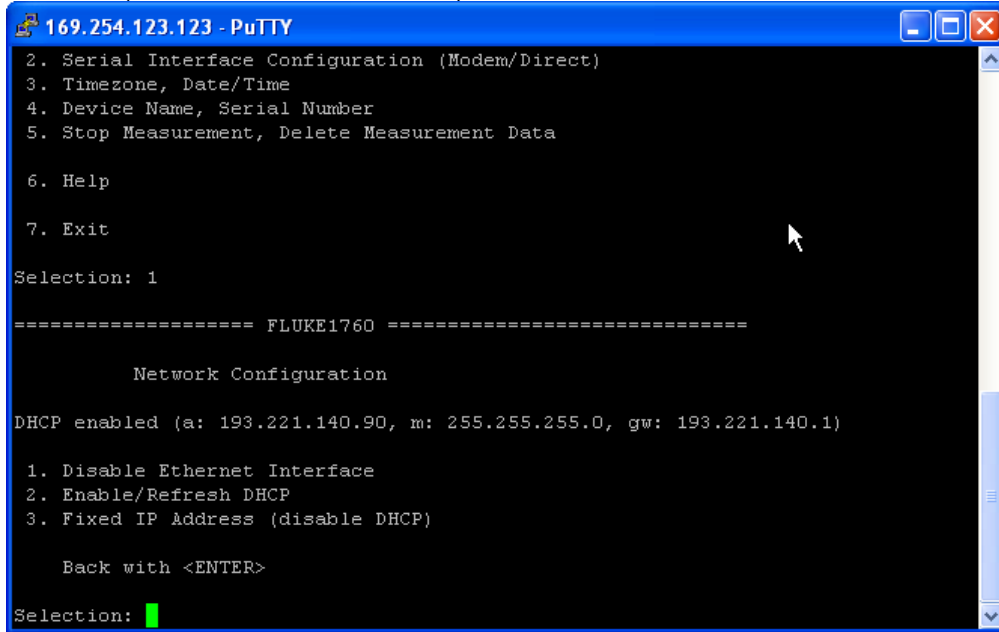
2. Select 2 (2. *Enable/Refresh DHCP*).

```
169.254.123.123 - PuTTY
 2. Serial Interface Configuration (Modem/Direct)
 3. Timezone, Date/Time
 4. Device Name, Serial Number
 5. Stop Measurement, Delete Measurement Data

 6. Help

 7. Exit

Selection: 1

==================== FLUKE1760 =============================

        Network Configuration

DHCP enabled (a: 193.221.140.90, m: 255.255.255.0, gw: 193.221.140.1)

 1. Disable Ethernet Interface
 2. Enable/Refresh DHCP
 3. Fixed IP Address (disable DHCP)

    Back with <ENTER>

Selection:
```
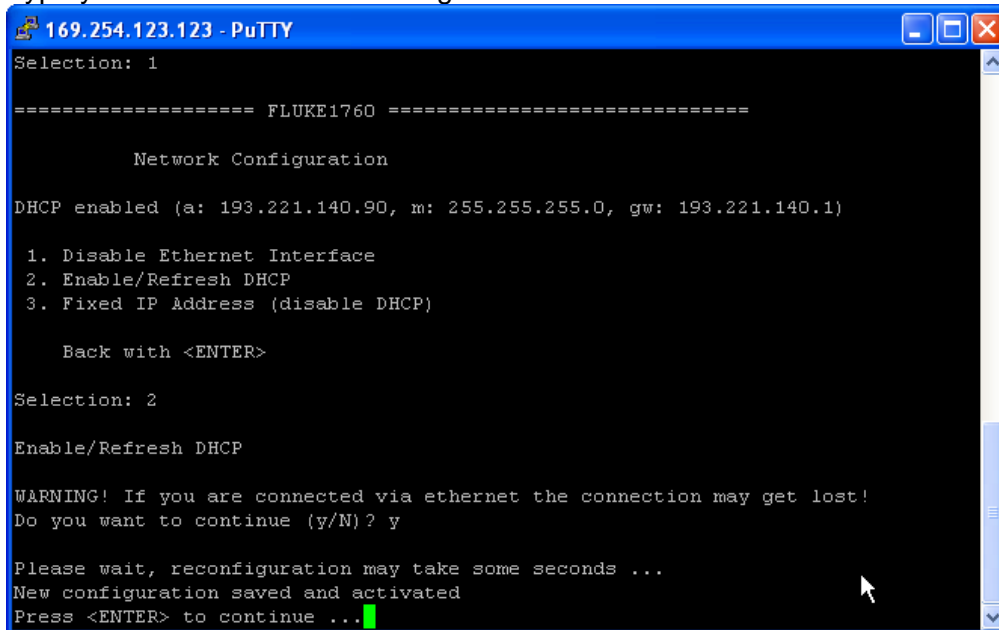
3. Type y or Y to confirm the warning.

```
169.254.123.123 - PuTTY
Selection: 1

==================== FLUKE1760 =============================

        Network Configuration

DHCP enabled (a: 193.221.140.90, m: 255.255.255.0, gw: 193.221.140.1)

 1. Disable Ethernet Interface
 2. Enable/Refresh DHCP
 3. Fixed IP Address (disable DHCP)

    Back with <ENTER>

Selection: 2

Enable/Refresh DHCP

WARNING! If you are connected via ethernet the connection may get lost!
Do you want to continue (y/N)? y

Please wait, reconfiguration may take some seconds ...
New configuration saved and activated
Press <ENTER> to continue ...
```
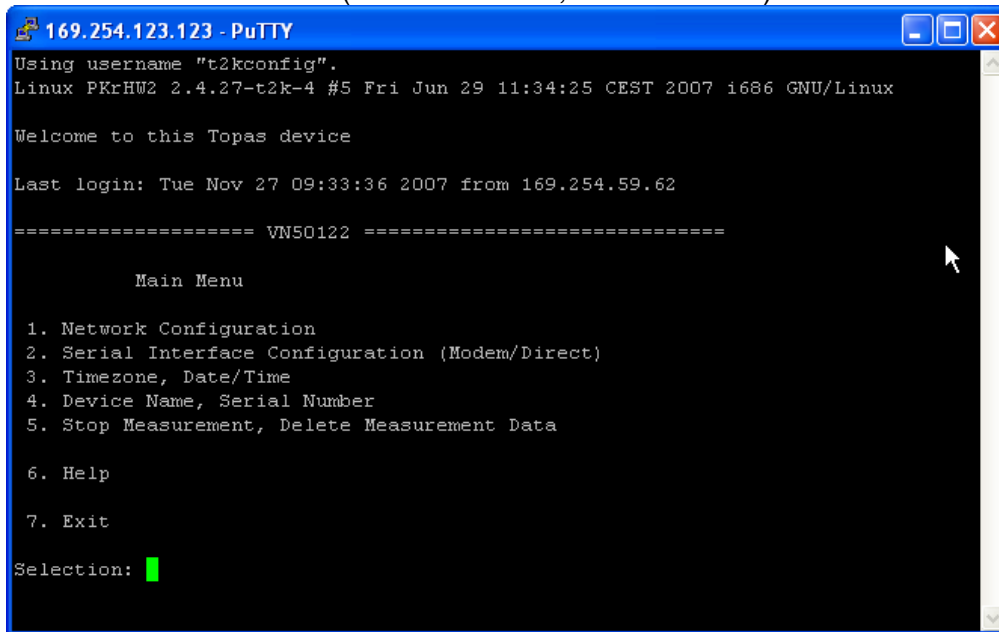
4. Press <ENTER> twice to get the main menu.

Set Default Device Name

1. In the main menu enter *4* (*4. Device Name, Serial Number*).

```
169.254.123.123 - PuTTY

Using username "t2kconfig".
Linux PKrHW2 2.4.27-t2k-4 #5 Fri Jun 29 11:34:25 CEST 2007 i686 GNU/Linux

Welcome to this Topas device

Last login: Tue Nov 27 09:33:36 2007 from 169.254.59.62

=================== VN50122 ==============================


          Main Menu

 1. Network Configuration
 2. Serial Interface Configuration (Modem/Direct)
 3. Timezone, Date/Time
 4. Device Name, Serial Number
 5. Stop Measurement, Delete Measurement Data

 6. Help

 7. Exit

Selection:
```
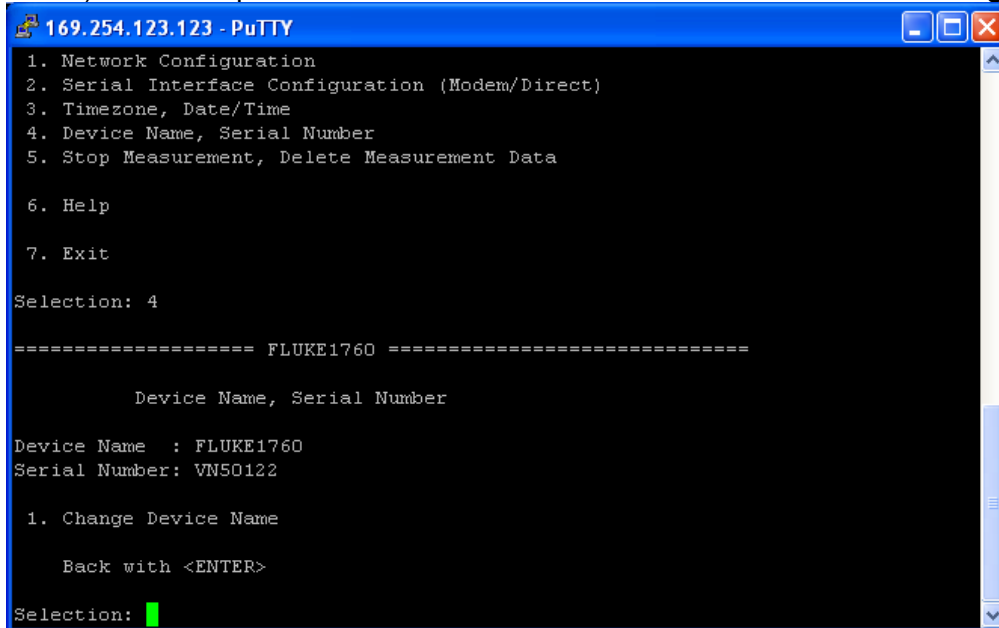
2. If the Device Name and Serial Number is not identical enter *1* (*1. Change Device Name*) otherwise press <ENTER> and continue with **Exit Advanced Settings**.

```
169.254.123.123 - PuTTY

 1. Network Configuration
 2. Serial Interface Configuration (Modem/Direct)
 3. Timezone, Date/Time
 4. Device Name, Serial Number
 5. Stop Measurement, Delete Measurement Data

 6. Help

 7. Exit

Selection: 4

=================== FLUKE1760 ==============================


          Device Name, Serial Number

Device Name  : FLUKE1760
Serial Number: VN50122

 1. Change Device Name

    Back with <ENTER>

Selection:
```
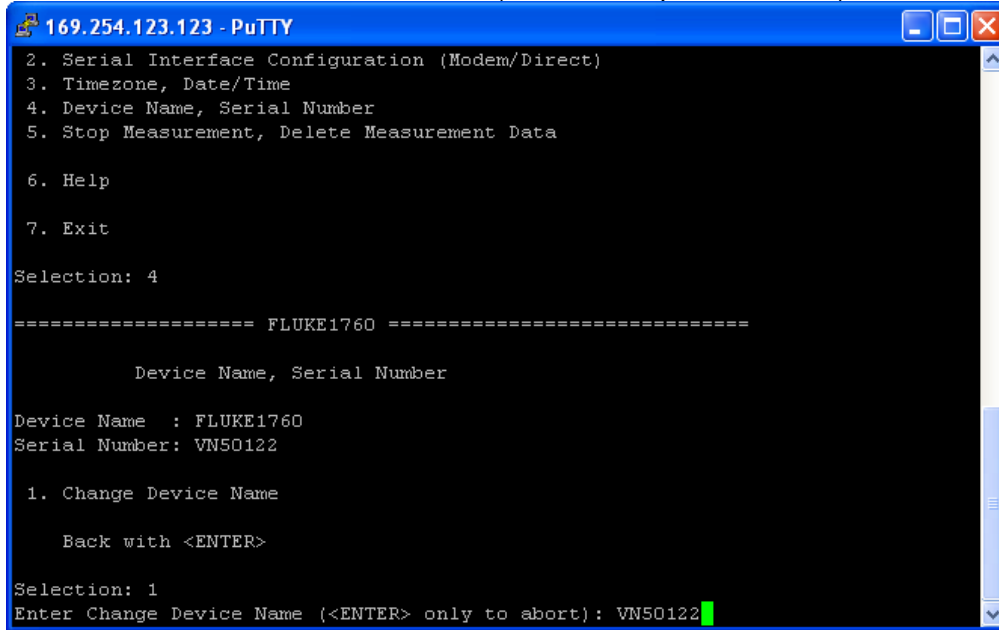
3. Enter the serial number of the device (in this example: VN50122).

```
169.254.123.123 - PuTTY
2. Serial Interface Configuration (Modem/Direct)
3. Timezone, Date/Time
4. Device Name, Serial Number
5. Stop Measurement, Delete Measurement Data

6. Help

7. Exit

Selection: 4

=================== FLUKE1760 ===============================

          Device Name, Serial Number

Device Name  : FLUKE1760
Serial Number: VN50122

 1. Change Device Name

    Back with <ENTER>

Selection: 1
Enter Change Device Name (<ENTER> only to abort): VN50122
```
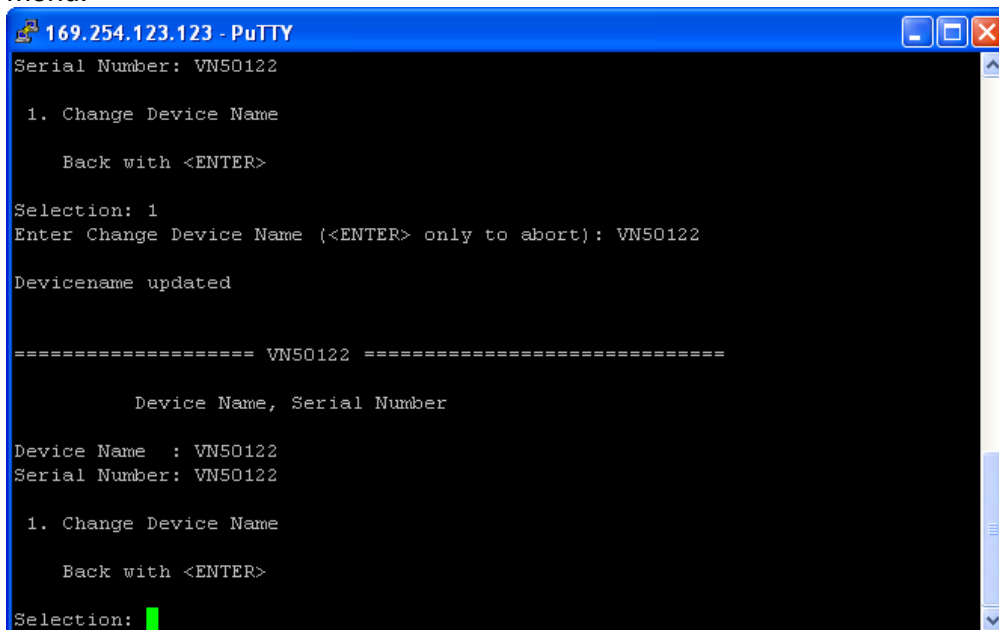
4. The window shows the new device name. Press <ENTER> to jump back to the main menu.

```
169.254.123.123 - PuTTY
Serial Number: VN50122

 1. Change Device Name

    Back with <ENTER>

Selection: 1
Enter Change Device Name (<ENTER> only to abort): VN50122

Devicename updated


=================== VN50122 ===============================

          Device Name, Serial Number

Device Name  : VN50122
Serial Number: VN50122

 1. Change Device Name

    Back with <ENTER>

Selection:
```
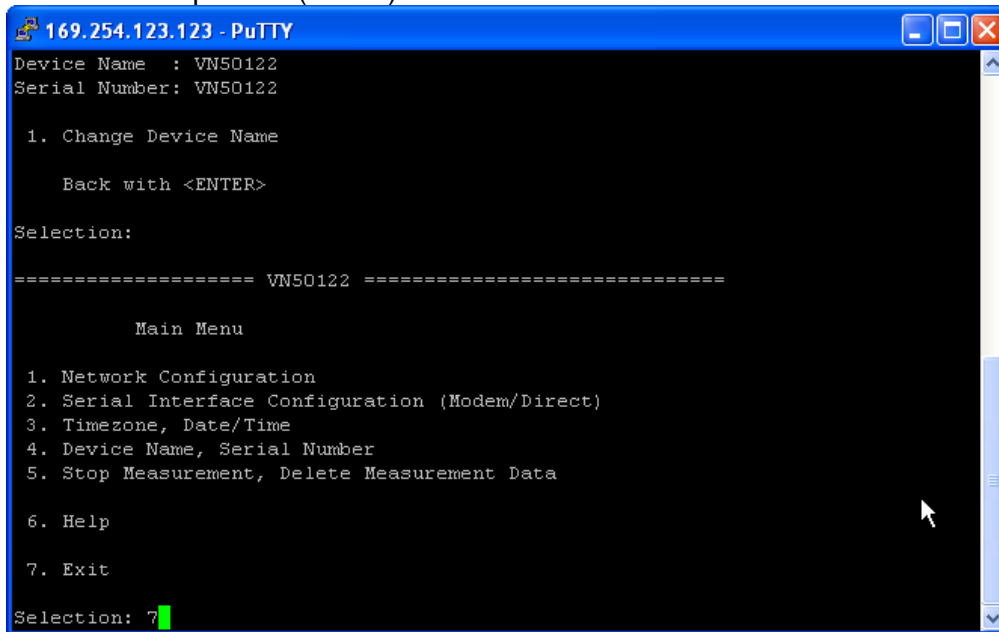
Exit Advanced Settings

1. In main menu press 7 (*7. Exit*).