

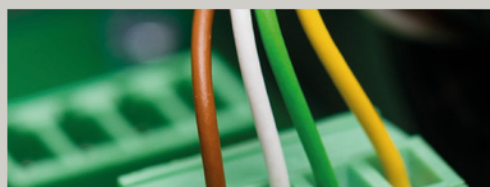


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»Product: SMT100
»Interface: SDI-12

» Application Note AN001
Interfacing the SMT100 SDI-12 with
Campbell Scientific data loggers



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Application Note AN001

Introduction

This application note describes how to use the SMT100 SDI-12 together with Campbell Scientific dataloggers.

Requirements

- SMT100 SDI-12 version
- Campbell Scientific datalogger (e.g. CR1000)
- Campbell Scientific configuration software

Step 1

Connect SMT100 to CR1000

Brown: 12 V

White: G (GND)

Green: C7 (SDI-12 data)



Figure 1: Campbell Scientific datalogger CR1000

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Step 2

Start „Device Configuration Utility (Terminal)“.

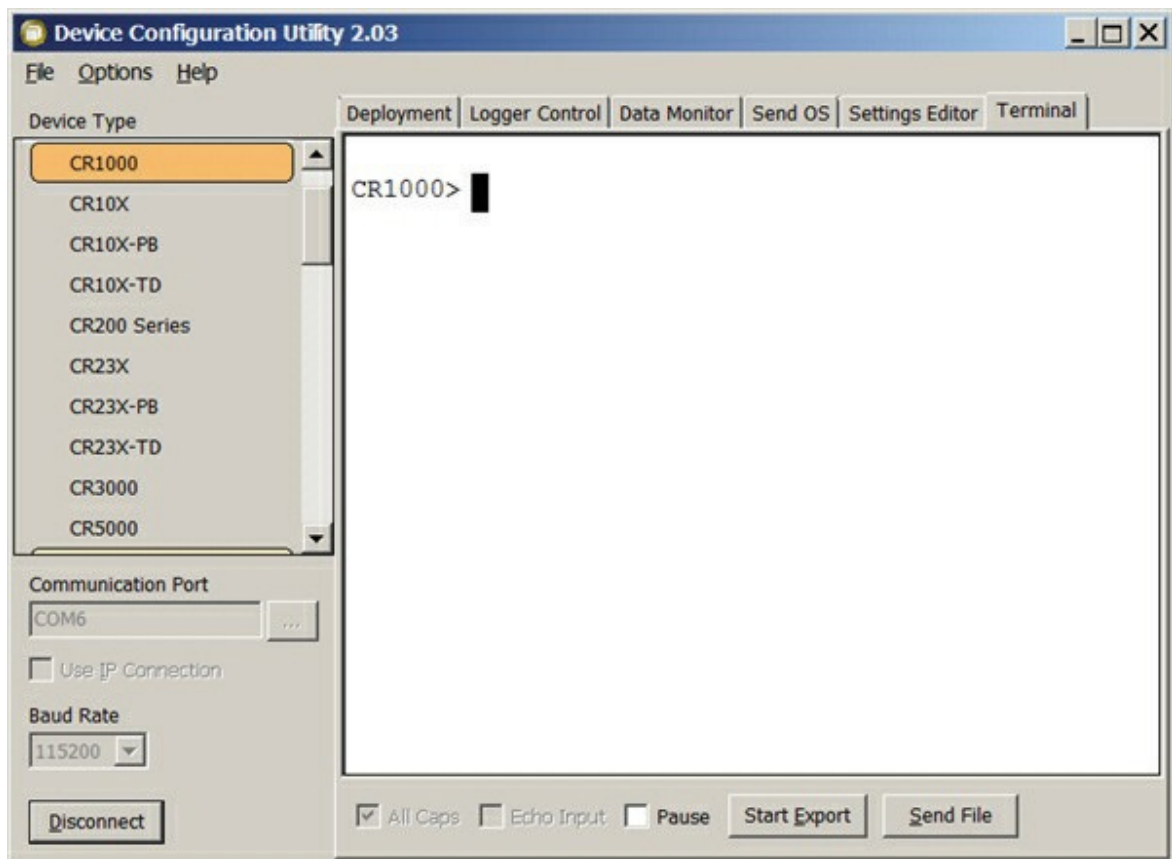


Figure 2: Device Configuration Utility

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Step 3

Enter SDI12 and Port 7

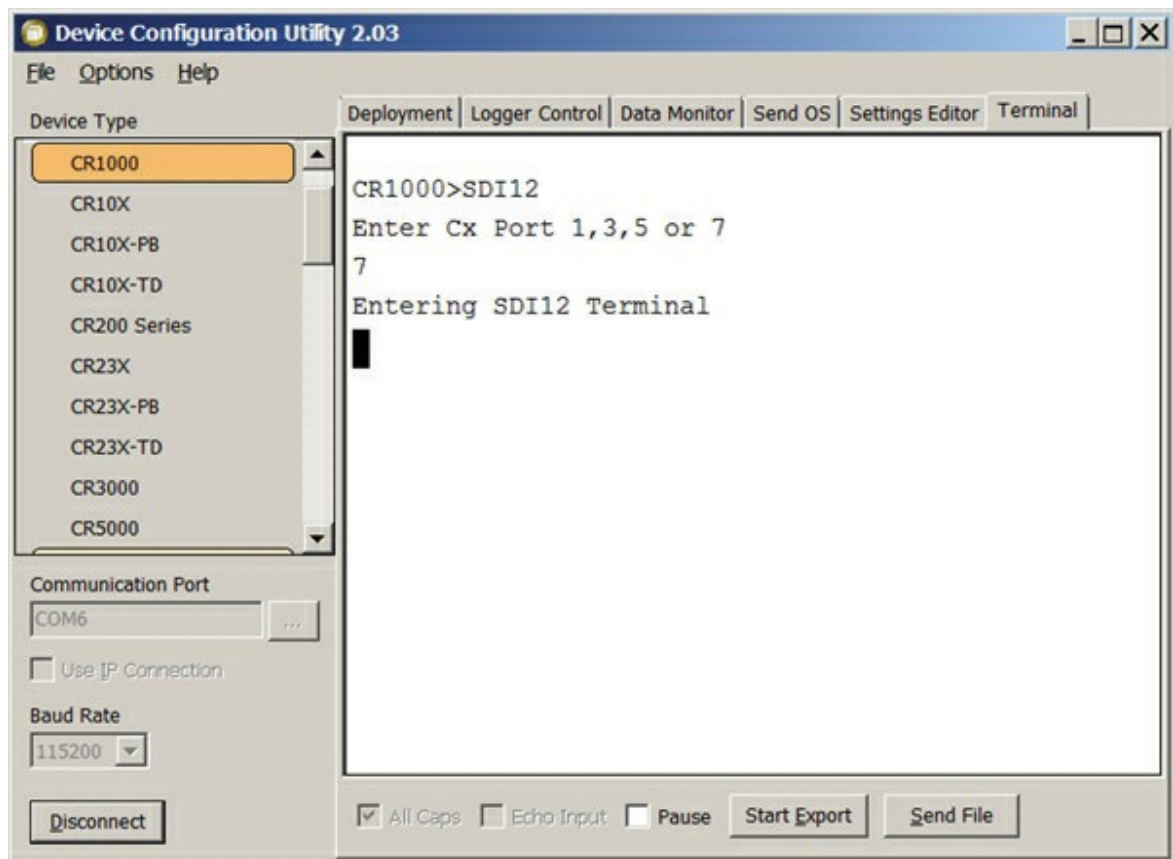


Figure 3: Choose SDI12 and Port

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Step 4

Enter 1M!

- Sensor is preconfigured with address 1.
- This command executes the measurement.

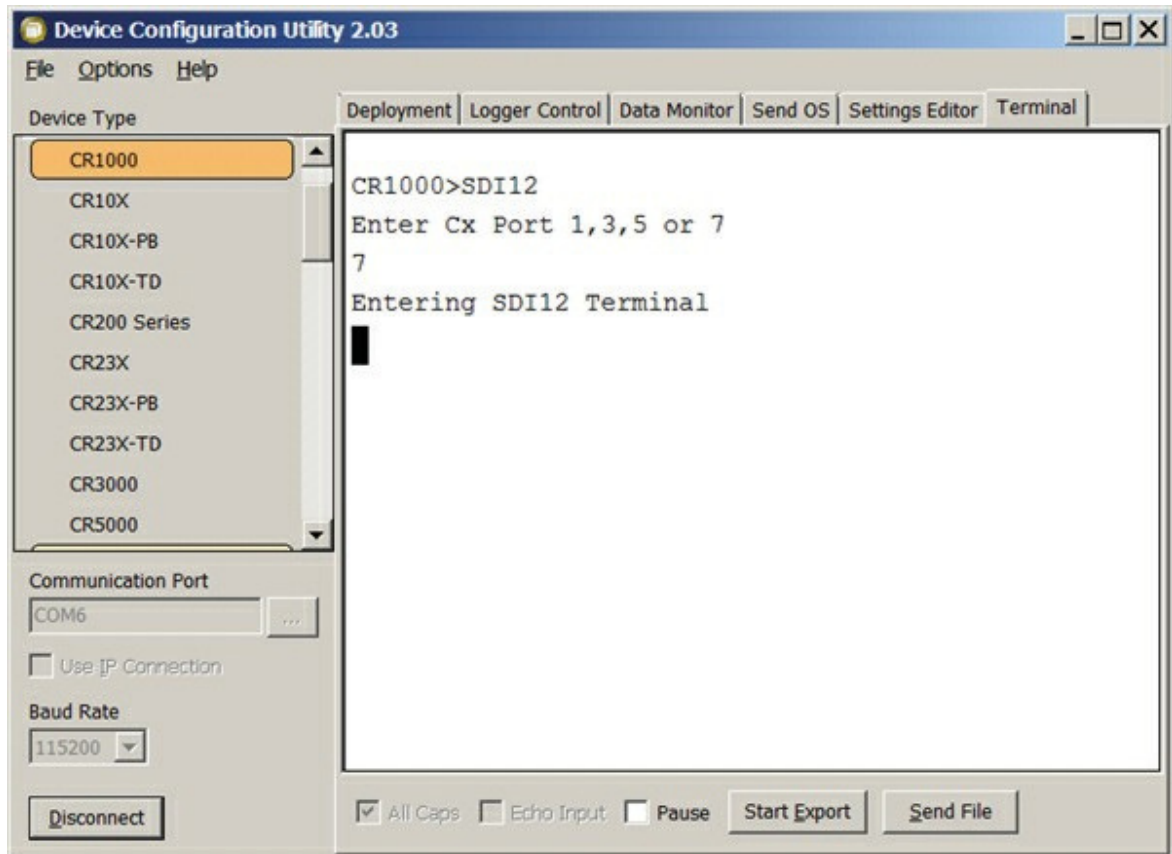


Figure 4: Choose SDI12 and Port

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Step 5

Wait at least 2 s and then enter 1D0! for reading the measurement data.

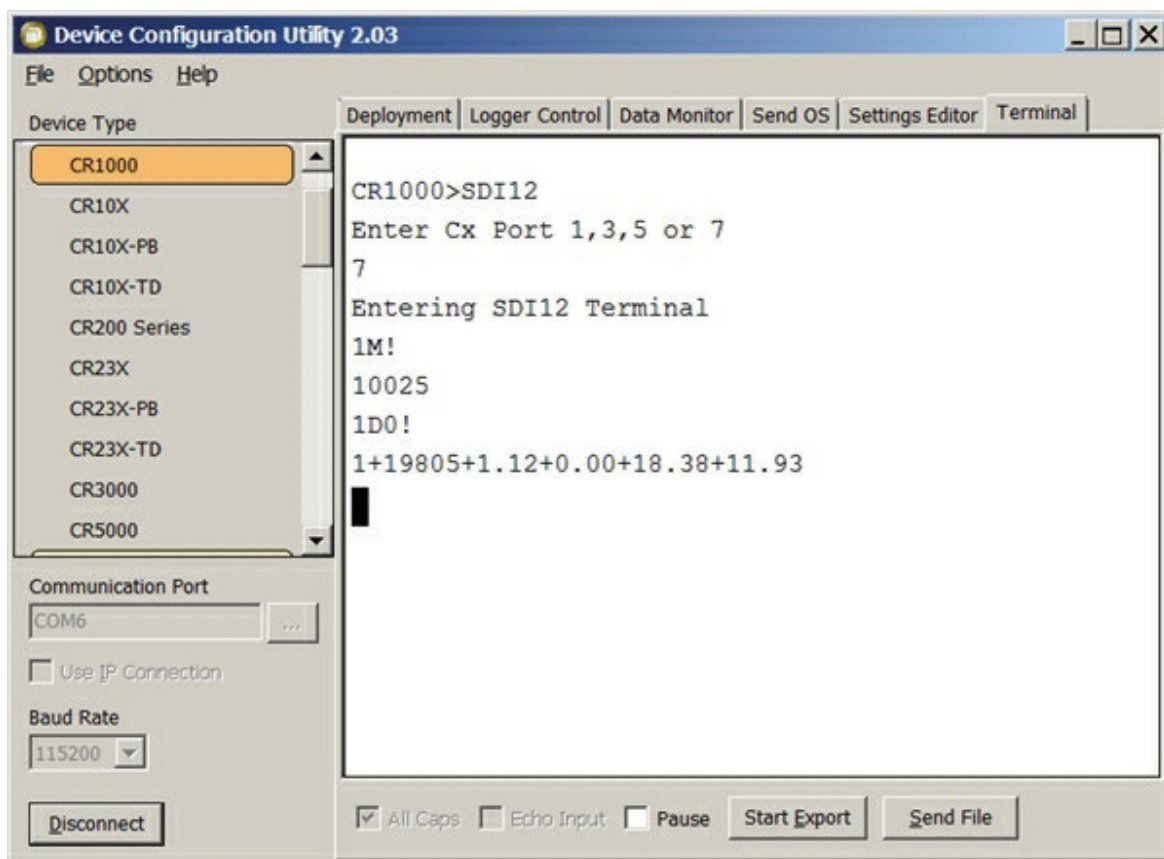


Figure 5: Read measurement data

Description of the information returned:

- 1: sensor address
- 19805: raw data
- 1.12: permittivity
- 0.00: water content
- 18.38: temperature
- 11.93: battery voltage