

Downloading data from the Microtops II Sunphotometer: Guide to RealTerm serial communications program

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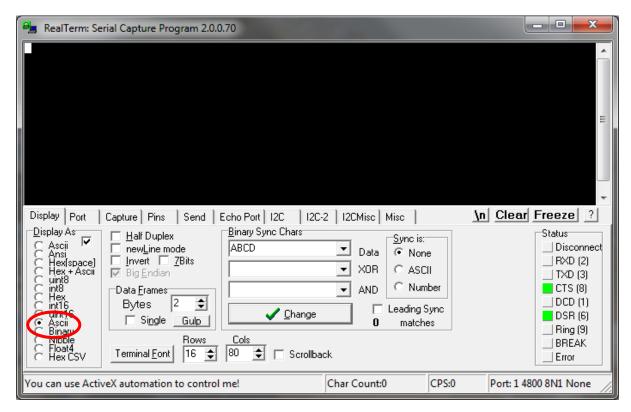
The following guide provides information on how to create a connection to the Microtops II sun photometer using RealTerm, and also how to retrieve collected data.

RealTerm is serial communications software available at:

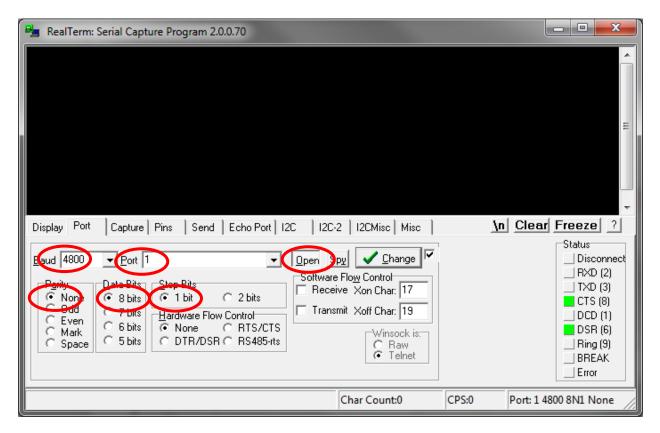
http://realterm.sourceforge.net

- Connect serial cable to COM port of PC
- Switch on sun photometer
- Run RealTerm

Display Tab:

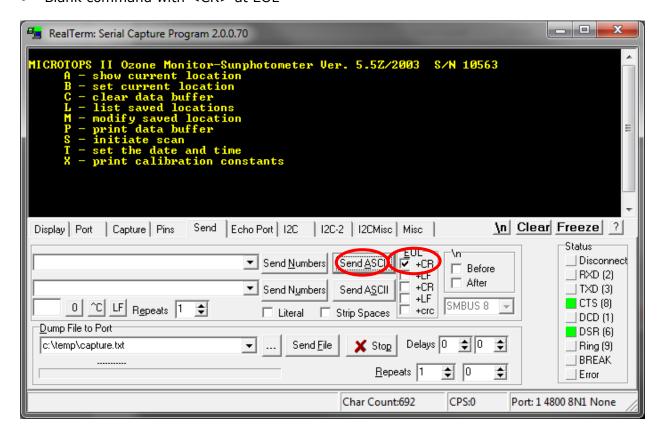


Port Tab:

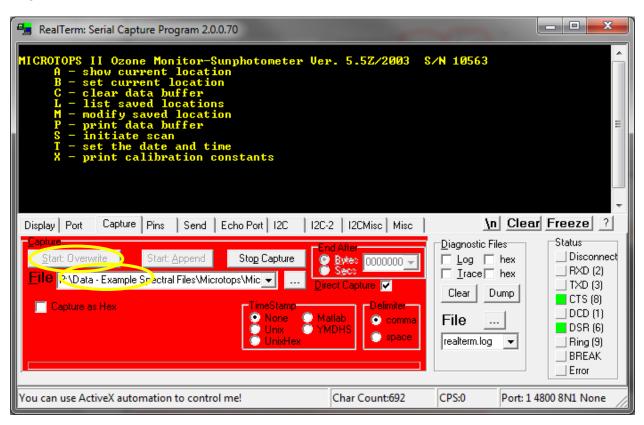


Send Tab (Initialise)

Blank command with <CR> at EOL

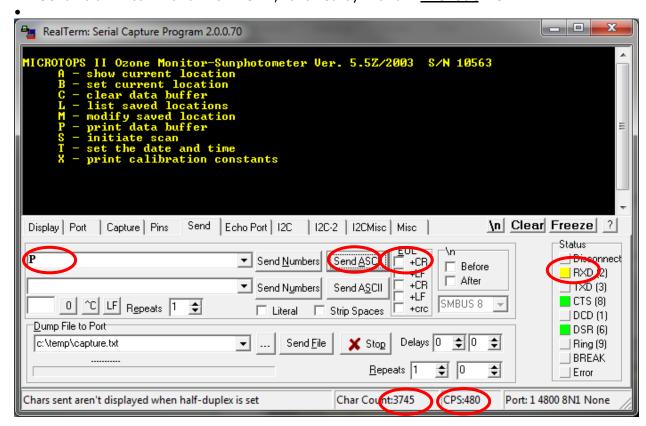


Capture Tab:

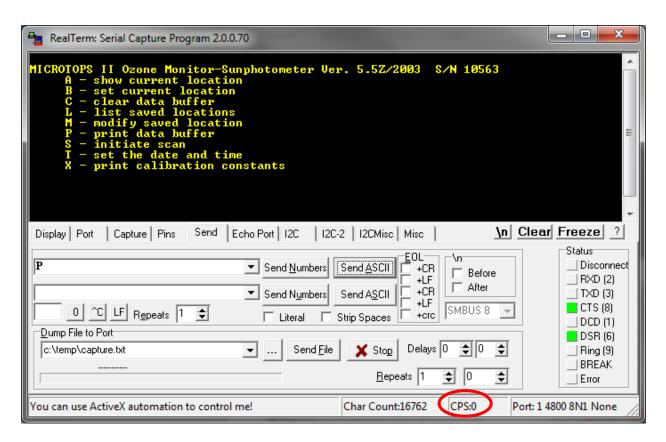


Send Tab: (Record serial number, calibration factors, download data from memory)

- Note in Capture Mode the display does not update.
- Send "blank" command with <CR>, followed by X and P without <CR>



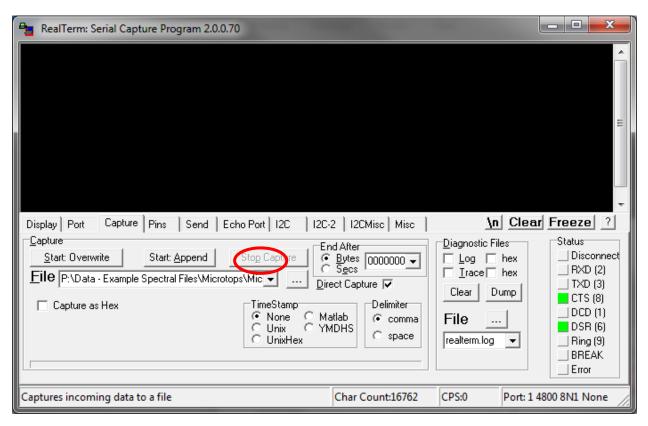
Note Char Count increments as data is transferred to the PC.



Note CPS returns to zero at end of data transfer.

Capture Tab

Stop capture



TXT File

```
_ D X
    MicroTops #10563 Data_Wytham Woods_May 2013.txt - Notepad
   File Edit Format View Help
                                                                                                                                                                                                                                                                                             A
  MICROTOPS II Ozone Monitor-Sunphotometer Ver. 5.5Z/2003 S/N 10563
                 A - show current location
B - set current location
                 C - clear data buffer
L - list saved locations
M - modify saved location
P - print data buffer
S - initiate scan
                                                                                                                                                                                                                                                                                            Ε
                 T - set the date and time
X - print calibration constants
 Current calibration constants 5/N:10563
LNV01=6.867E+00 LNV02=7.023E+00 LNV03=6.583E+00 LNV04=7.229E+00 LNV05=7.059E+00
 C1=1.923E-02 C2=1.349E-02 C3=1.309E-02 C4=6.017E-03 C5=6.184E-03 K=7.847E-01 B=5.945E-01 C=0.00
 POFFS=-1.694E+01 PSCALE=2.086E+01
 REC#0072
FIELDS:
SN,DATE,TIME,LATITUDE,LONGITUDE,ALTITUDE,PRESSURE,SZA,AM,SDCORR,TEMP,ID,SIG440,SIG675
10563,05/01/2013,11:18:39, 51.770, -1.332, 148, 1006,37.60,1.261,1.017, 8.9,95, 63
10563,05/01/2013,11:19:16, 51.770, -1.332, 147, 1006,37.57,1.261,1.017, 9.7,95, 63
10563,05/01/2013,11:19:29, 51.770, -1.332, 144, 1006,37.56,1.260,1.017, 10.0,95, 63
10563,05/01/2013,11:19:42, 51.770, -1.332, 143, 1006,37.55,1.260,1.017, 10.3,95, 63
10563,05/01/2013,11:19:56, 51.770, -1.332, 144, 1007,37.54,1.260,1.017, 10.5,95, 62
10563,05/01/2013,11:20:10, 51.770, -1.332, 144, 1007,37.53,1.260,1.017, 10.8,95, 62
10563,05/01/2013,11:20:22, 51.770, -1.332, 145, 1007,37.53,1.260,1.017, 10.8,95, 62
10563,05/01/2013,11:20:36, 51.770, -1.332, 145, 1007,37.52,1.260,1.017, 11.0,95, 61
10563,05/01/2013,11:31:41, 51.770, -1.332, 145, 1008,37.51,1.260,1.017, 11.2,95, 62
10563,05/01/2013,11:31:41, 51.770, -1.332, 161, 1003,37.08,1.252,1.017, 16.6,95, 63
10563,05/01/2013,11:32:08, 51.770, -1.332, 161, 1004,37.07,1.252,1.017, 16.7,95, 63
10563,05/01/2013,11:32:22, 51.770, -1.332, 162, 1004,37.07,1.252,1.017, 16.7,95, 63
10563,05/01/2013,11:32:22, 51.770, -1.332, 162, 1004,37.06,1.252,1.017, 16.7,95, 63
10563,05/01/2013,11:32:34, 51.770, -1.332, 162, 1004,37.05,1.252,1.017, 16.7,95, 63
 FIELDS:
 10563,05/01/2013,11:32:34,
10563,05/01/2013,11:32:54,
                                                                                                                                                     162, 1004,37.05,1.252,1.017, 16.7,95, 163, 1004,37.04,1.252,1.017, 16.7,95, 162, 1004,37.04,1.252,1.017, 16.6,95,
                                                                                          51.770,
                                                                                                                        -1.332,
                                                                                                                                                                                                                                                                                   62
                                                                                          51.770,
                                                                                                                        -1.332,
                                                                                                                                                                                                                                                                                    63
                                                                                                                                                                                                                                                                                   63 +
 10563,05/01/2013,11:33:06, 51.770,
                                                                                                                        -1.332,
```

Excel Spreadsheet

Import TXT file with comma delimited settings

