

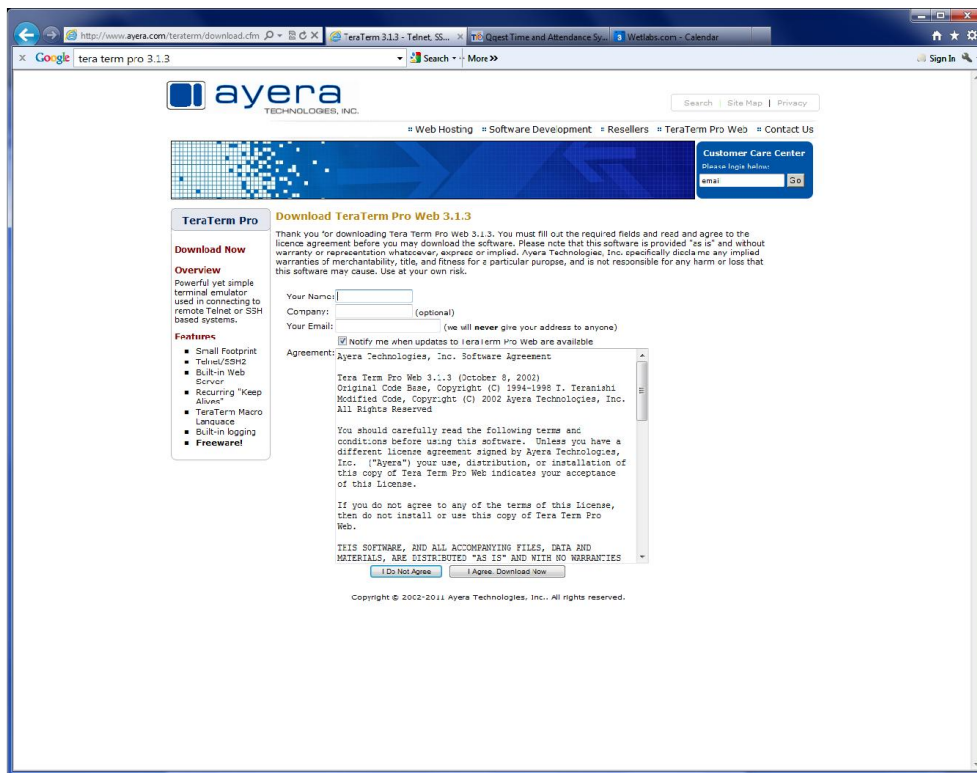
Tech Note 130312-1: Communication with Transmissometers Using a Terminal Window Program and Changing the Clean Water Value

Terminal Program

Use a terminal window program to interface between a sensor and a PC when not using ECOView or other host program provided by the manufacturer. The terminal window allows access to all functions of the sensor and the ability to view live data output. The instructions below are for downloading and setting up TeraTerm Pro, but the communication setup and protocols will be the same for other terminal window programs.

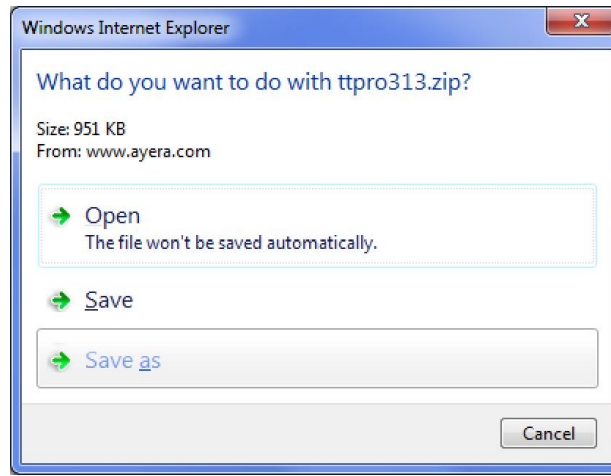
Download the program (free): <http://www.ayera.com/teraterm/download.cfm>

Follow the instructions on the website:

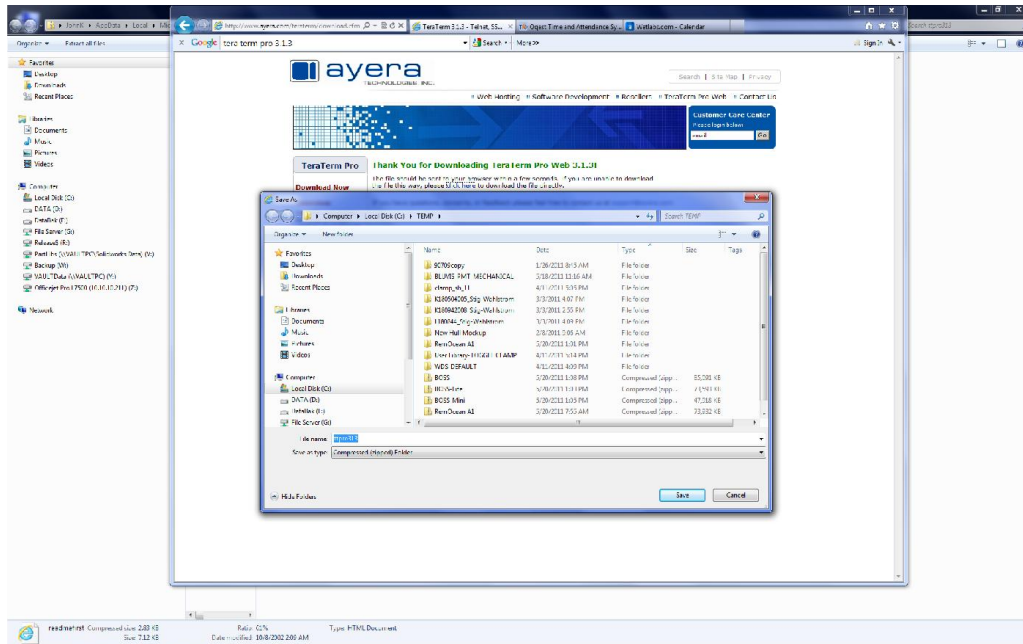


Complete the information required to allow the download.

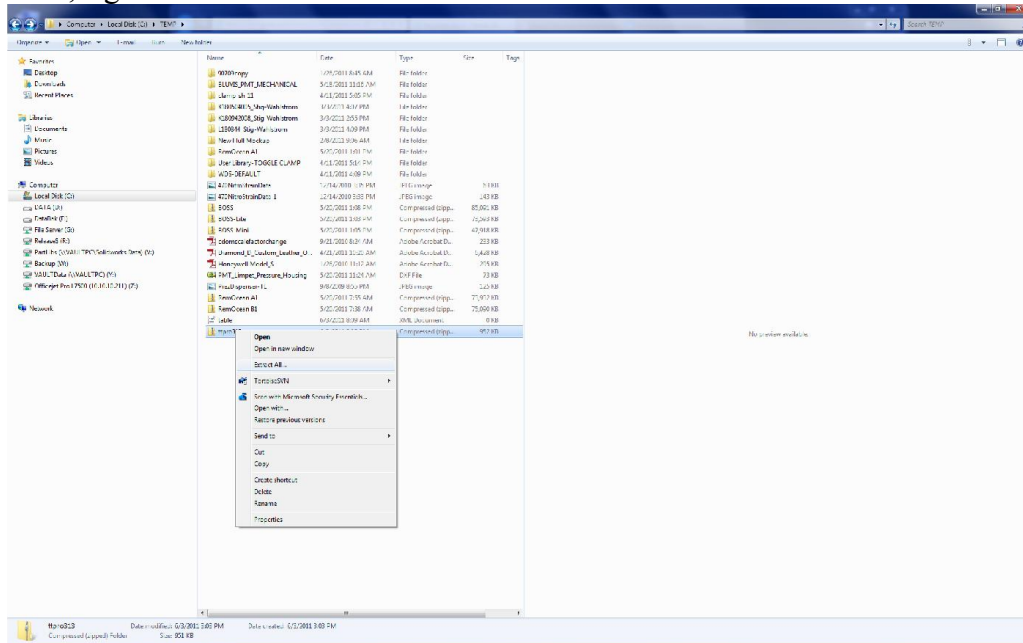
Select “Save As.”



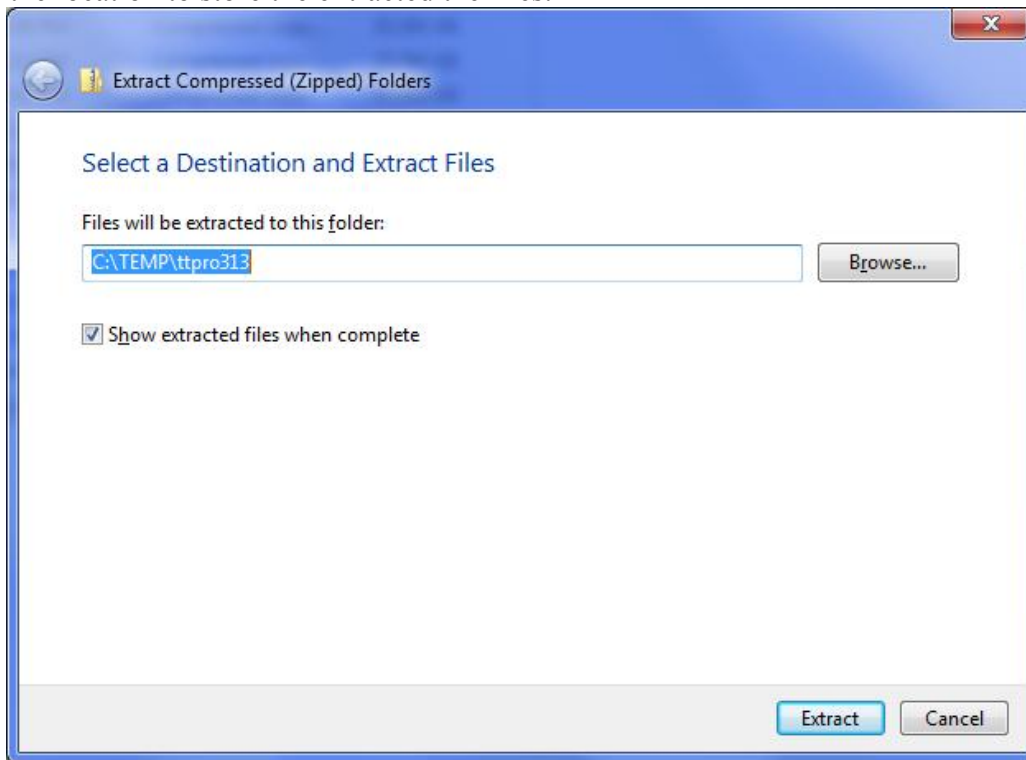
Select a folder to save the ZIP file in.



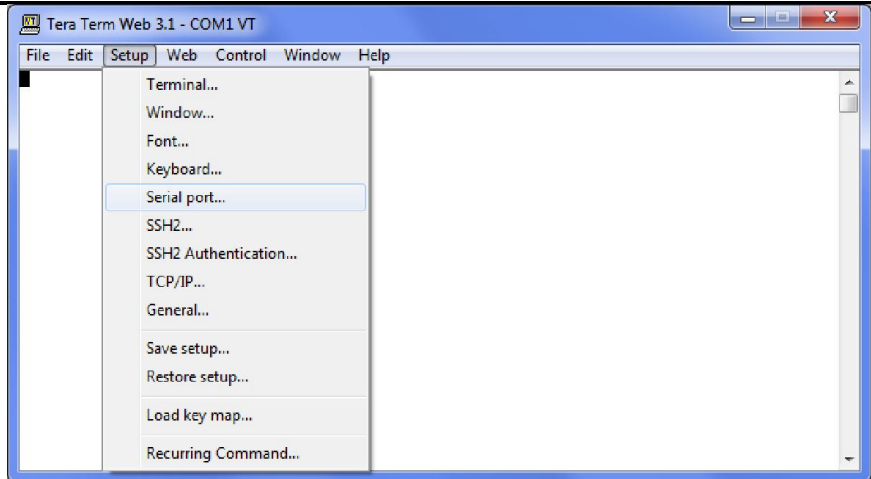
Once saved, right-click the ZIP file and select “Extract All.”



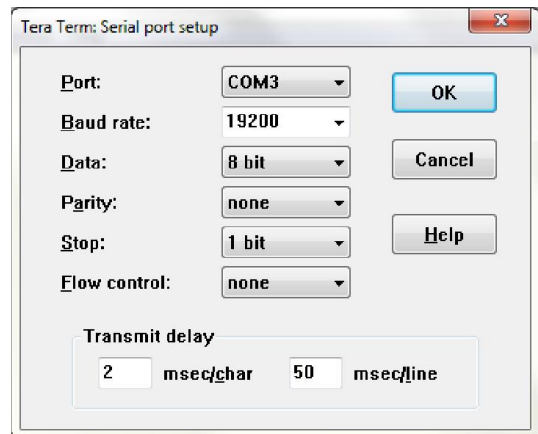
Select the location to store the extracted the files.



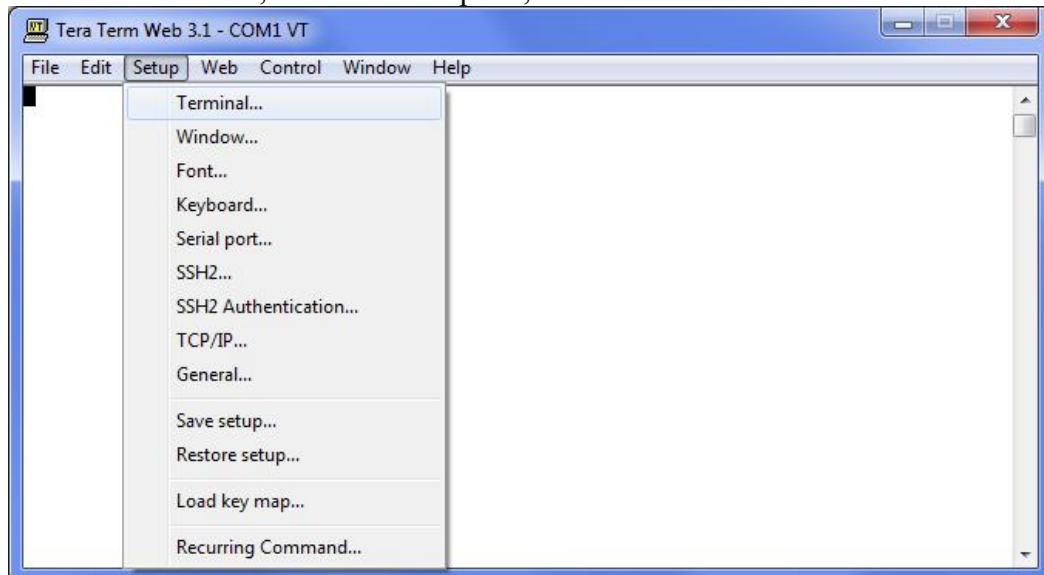
4. Select the “Setup” tab and drag the mouse to select “Serial port...”



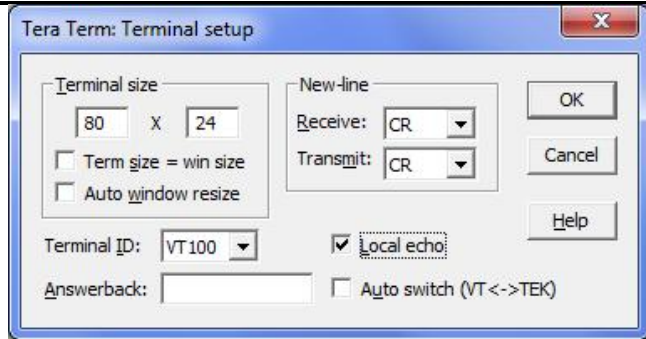
5. Change the baud rate to 19200.
6. Set the other parameters as given in the User’s Guide—
 - Data: 8 bit**
 - Parity: none**
 - Stop: 1 bit**
 - Flow Control: none**
7. Set the “msec/char” and “msec/line” text boxes to 2 and 50 respectively. These settings allow the sensor time to react to commands before another command is sent to it. Without these delays, errors in command settings are possible if many are set at once. Click “OK.”



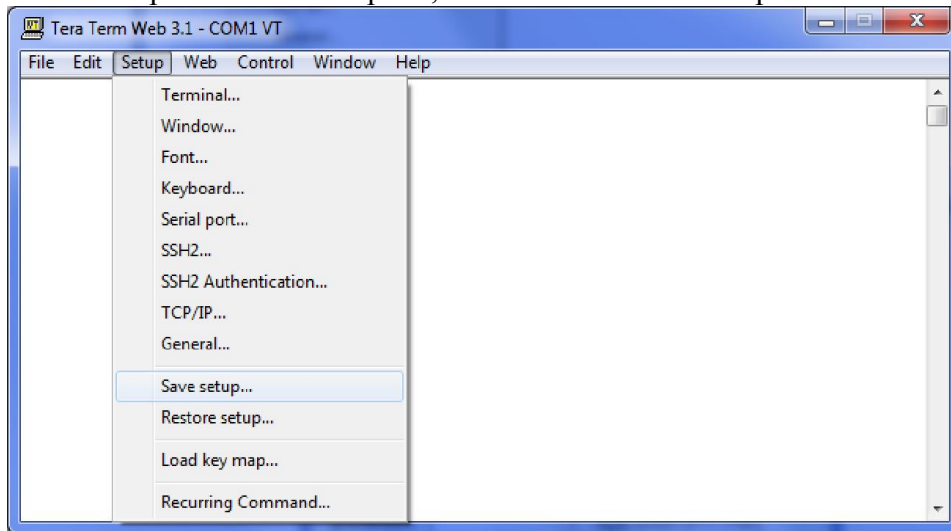
8. To turn “echo” on, select the Setup tab, then click on “Terminal...”



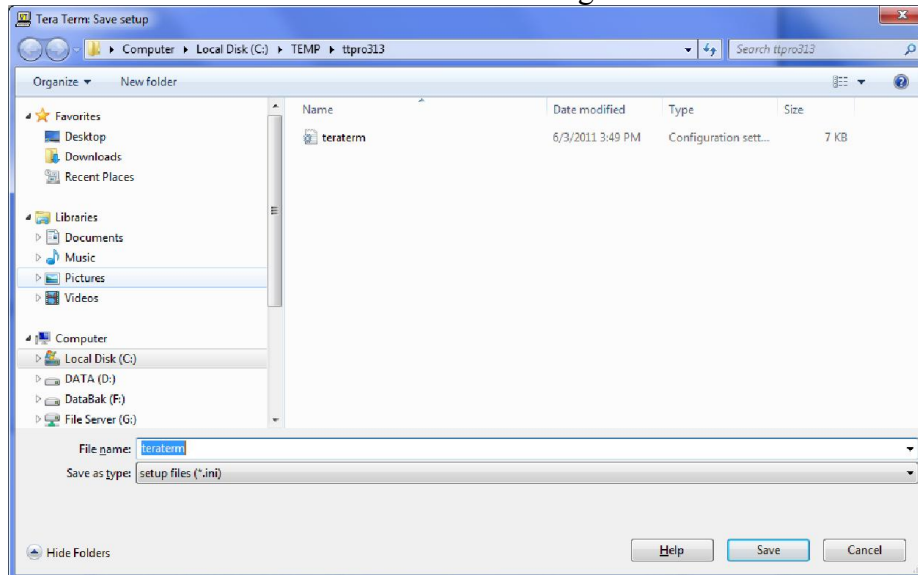
9. Select the “Local echo” check box. Click “OK.”



10. Save the setup: select the Setup tab, then click on “Save setup...”

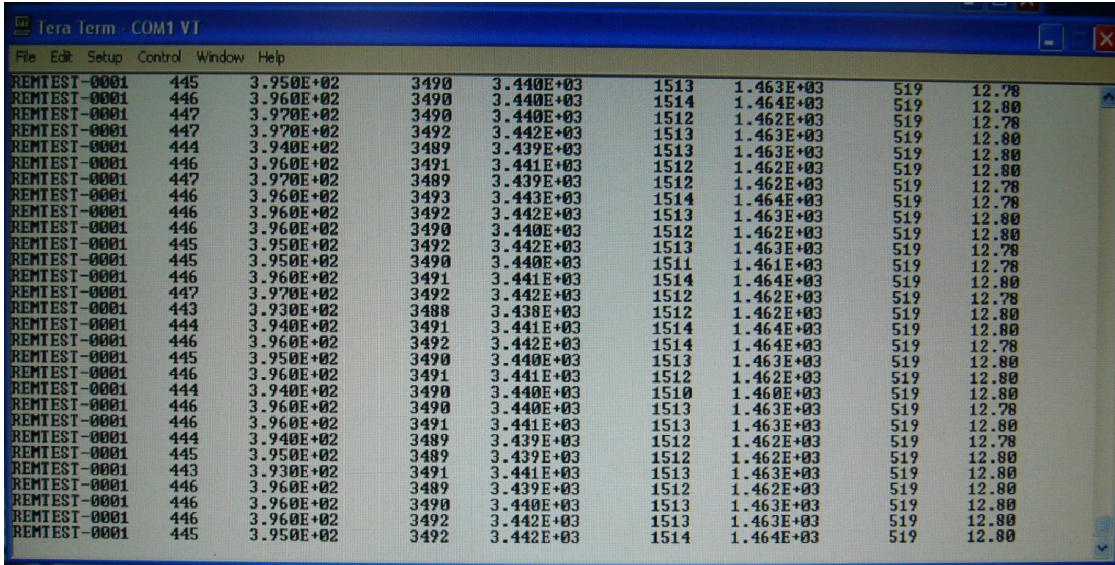


11. Enter a new name or overwrite the default configuration. Select “Save” when completed.



Setting Up the Sensor

1. Have a terminal window program running.



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Tera Term - COM1 VT
File Edit Setup Control Window Help
REMTST-0001 445 3.950E+02 3490 3.440E+03 1513 1.463E+03 519 12.78
REMTST-0001 446 3.960E+02 3490 3.440E+03 1514 1.464E+03 519 12.80
REMTST-0001 447 3.970E+02 3490 3.440E+03 1512 1.462E+03 519 12.78
REMTST-0001 447 3.970E+02 3492 3.442E+03 1513 1.463E+03 519 12.80
REMTST-0001 444 3.940E+02 3489 3.439E+03 1513 1.463E+03 519 12.80
REMTST-0001 446 3.960E+02 3491 3.441E+03 1512 1.462E+03 519 12.80
REMTST-0001 447 3.970E+02 3489 3.439E+03 1512 1.462E+03 519 12.78
REMTST-0001 446 3.960E+02 3493 3.443E+03 1514 1.464E+03 519 12.78
REMTST-0001 446 3.960E+02 3492 3.442E+03 1513 1.463E+03 519 12.80
REMTST-0001 446 3.960E+02 3490 3.440E+03 1512 1.462E+03 519 12.80
REMTST-0001 445 3.950E+02 3492 3.442E+03 1513 1.463E+03 519 12.78
REMTST-0001 445 3.950E+02 3490 3.440E+03 1511 1.461E+03 519 12.78
REMTST-0001 446 3.960E+02 3491 3.441E+03 1514 1.464E+03 519 12.80
REMTST-0001 447 3.970E+02 3492 3.442E+03 1512 1.462E+03 519 12.78
REMTST-0001 443 3.930E+02 3488 3.438E+03 1512 1.462E+03 519 12.80
REMTST-0001 444 3.940E+02 3491 3.441E+03 1514 1.464E+03 519 12.80
REMTST-0001 446 3.960E+02 3492 3.442E+03 1514 1.464E+03 519 12.78
REMTST-0001 445 3.950E+02 3490 3.440E+03 1513 1.463E+03 519 12.80
REMTST-0001 446 3.960E+02 3491 3.441E+03 1512 1.462E+03 519 12.80
REMTST-0001 444 3.940E+02 3490 3.440E+03 1510 1.460E+03 519 12.80
REMTST-0001 446 3.960E+02 3490 3.440E+03 1513 1.463E+03 519 12.78
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REMTST-0001 446 3.960E+02 3489 3.439E+03 1512 1.462E+03 519 12.80
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REMTST-0001 446 3.960E+02 3492 3.442E+03 1513 1.463E+03 519 12.80
REMTST-0001 445 3.950E+02 3492 3.442E+03 1514 1.464E+03 519 12.80

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2. Plug the DB-9 connector on the test cable into the host PC's serial port.

Note that serial input locations will vary between computer manufacturers.





1. Turn on the power supply and make sure it is set to 12V–15V before the test cable is connected.



2. Turn off the power supply.
3. Connect the power supply to the test cable.
4. Connect the sensor to the test cable.

Connector Pin-outs

| Pin | Function | MCBH-6-MP |
|-----|-------------|-----------|
| 1 | Ground | |
| 2 | RS-232 (RX) | |
| 3 | Reserved | |
| 4 | V in | |
| 5 | RS-232 (TX) | |
| 6 | Analog out | |

| Pin | Function | Molex (OEM) |
|-----|----------|-------------|
| 1 | NC | |
| 2 | V+ | |
| 3 | TX | |
| 4 | RX | |
| 5 | Reserved | |
| 6 | Ground | |

| Pin | Function | Diagram |
|-----|---------------|---------|
| 1 | TX ECO FLbbCD | |
| 2 | NC | |
| 3 | TX OCR-504 | |
| 4 | NC | |
| 5 | TX C-Rover | |
| 6 | NC | |
| 7 | NC | |
| 8 | NC | |
| 9 | V+ ECO FLbbCD | |
| 10 | V+ OCR-504 | |
| 11 | V+ C-Rover | |
| 12 | GND | |

LPBH-12-MP (REM-B only)

