Measuring Depth using a *dataTaker* data logger and a Druck PTX 1830 Series Depth/Level Sensor

This document describes the process of connecting the Druck PTX 1830 depth/level sensor to a *dataTaker* DT8x series data logger. The sensor outputs a 4-20mA signal and will be powered by the *dataTaker's* switchable 12V regulated voltage output.

1   Equipment required

- *dataTaker* DT8x data logger
- PTX 1830 depth sensor
- Wire

2   Connecting the sensor

Connect the wires from the sensor to the logger as follows:

- Red Wire → **12V** terminal
- Blue Wire → Channel **1 #** terminal
- Connect a wire between **DGND** and **EXT#** terminals

3   Taking measurements

3.1   Basic measurement

The basic measurement outputs a scaled output. The code is as simple as this:

```
S1=0,10"m"    'scale a 4-20mA reading to a 0-10m value
1SSPWR=1      'turn on the 12V output
1#L("depth~m",S1) 'sample, scale and log depth
```

3.2   Full Program

The full program samples the sensor once per hour and stores it to the internal memory.

```
BEGIN "PTX1830"
'Sample program Level sensor PTX 1830 (4-20mA)
'Sampling period: 1 sample / hour

    S1=0,10"m"    'set scale of 4-20mA sensor
    LOGON


'=================================================
'    Schedule A
'   - Logs to the internal memory (B:)
'   - Logs up to 3MB of data records, overwrites when full
'   - Runs every 1 hour
'=================================================
RA("B:",DATA:OV:3MB)1H
    'control power and sample from the sensor
    1SSPWR(W)=1 1#L("2-Minute Depth~m",S1,MD5000,FF3) 1SSPWR(W)=0
END
```