



Quick Start Guide for GPRS Transient Logger with IDT & HWMOnline

Version 1.0

1. Download and install the 'Installation and Diagnostics Tool' from the CD-ROM (See main user guide for details on how to do this).
2. Connect your Transient Logger to your PC with the USB communications cable, CABA8585
3. Run the IDT program.
4. Click <<Read Logger>> and the IDT will download the current configuration of the logger.

The following example assumes the user wishes to capture normal 15m logged pressure data with 100Hz transient detection of any pressure surges over 75m with continuous recording to the SD card.

5. Set the Sample Frequency to 100 samples per second
6. Choose 'Continuous recording to SD and triggered on alarm'
7. Set 5 seconds pre trigger recording time
8. Set 30 seconds recording time

A screenshot of the 'Transient / Secondary logging' settings window in the IDT software. The window has a title bar and contains several configuration options. 'Sample Frequency (samples/sec)' is set to 100 in a dropdown menu. Under 'Transient / Secondary Mode', three radio buttons are present: 'Record data at specific times', 'Recording triggered on alarm event', and 'Continuous recording to SD and triggered on alarm', which is selected. Below these, 'Data stored before each recording' is set to 5 seconds in a dropdown, and 'Duration of each recording' is set to 30 seconds in a dropdown. At the bottom, there is a checkbox labeled 'Erase previous recordings' which is currently unchecked. Four orange arrows originate from the numbered list on the left and point to these specific settings: arrow 5 points to the sample frequency dropdown, arrow 6 points to the selected radio button, arrow 7 points to the pre-trigger recording time dropdown, and arrow 8 points to the recording duration dropdown.

These settings will continuously record data to the SD card from the Start Time and when an event is triggered by the alarm (see below) it will make a Secondary recording from 5 seconds before the alarm was triggered to 25 seconds afterwards.

9. Select alarm condition 1 (this is the alarm that triggers the Transient recordings)
10. Tick the Upper alarm box
11. Enter 75 into the level box
12. Enter 1 into the Hysteresis box

Cond 1 Cond 2 Cond 3 Cond 4 Cond 5 Cond 6

Transient alarm conditions 1

Upper level 1 75.00

☐ Lower
☒ Upper
☐ Minimum Night Flow
☐ Rate of Change
☐ Dif>
☐ Dif<
☐ Out Band
☐ In Band

Hysteresis 1 1.00

This sets the alarm threshold to 75m with a Hysteresis of 1m, meaning that the logger will wait until the logged pressure passes above the 75m threshold, but will not trigger an additional alarm until the pressure has dropped below 74m again. You can adjust this figure to reduce the number of repeated triggers.

13. Click the <<Setup Logger>> button to configure the logger.
Note: If you see an error that the software cannot find the logger, simply unplug the logger and plug it back in again.
14. When prompted that no call outs are set, click <<Yes>> to continue.
15. When successful programming has been confirmed, unplug the logger and deploy it on site.

IMPORTANT: The SD card is cleared out when you click the Setup Logger button so be sure you have saved any data **before** restarting the logger.

Configuring on site

1. Place the antenna of the logger in a location where a suitable signal is likely, e.g. near the top of the chamber.
2. Connect a PC or Tablet to the logger and run the IDT
3. Click <<Read Logger>>
4. In the Time(s) Data Is Sent section, program some times when you wish the logger to send its routine data in. The logger will always send in transient data recordings immediately after making them. To preserve battery life, make as few calls as possible.

Address	Type	Mode	Time hh:mm
On	UDP (HWM)	Time	09:00
On	UDP (HWM)	Time	11:00
On	UDP (HWM)	Time	13:00
Off			

Days Of Week To Send Data

☒ Mon
 ☒ Tue
 ☒ Wed
 ☒ Thu
 ☒ Fri
 ☐ Sat
 ☐ Sun

5. Scroll to the bottom and Click <<Setup Logger>> to start the logger.
6. Close the lid of the chamber as much as you can so that it represents as close as possible the final site configuration.
7. Click <<GPRS Test>> button.
8. The IDT will now perform a GPRS communications check to ensure that the site setup is good enough to ensure data is received by HWMOnline.

GPRS Connection Test - V1.34

Status : Finding host IP address ... (48s)

Type : Command line

IMSI : 234104693074466

Operator : "O2 - UK"

CSQ : 26

APN : "mobile.o2.co.uk" "user" "password"

IP Addr. : 10.69.41.170

Abort

9. Note the CSQ reading. Values lower than 7 will not provide an adequate connection; seek a better antenna position, if possible above ground.
10. When the test completes, click <<OK>>

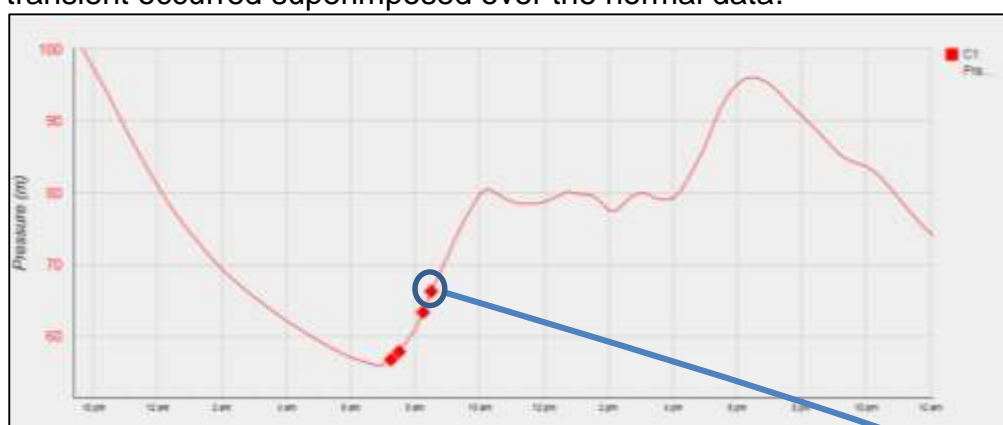
How to View with HWMOnline (DataGate)

1. Using a Web browser, navigate to <https://www.hwmonline.com>
2. Enter the username and password that will have been provided to you by HWM for your DataGate account.
3. From the Site Dropdown box choose your logger

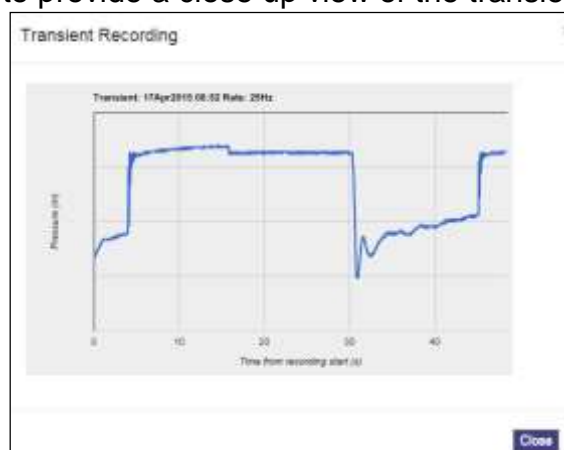


4. Click <<Show Graph>>

HWMOnline will display a diamond symbol to indicate the point where a transient occurred superimposed over the normal data.



Click the diamond to provide a close up view of the transient



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