User Guide





EvaluatIR

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Contents

Unpacking and Powering the Product	3-4
Installing the Software	5
Configuring the EvaluatIR	5-9
Recording Data	10
Retrieving Data	11-12
Advanced Functions	13
Troubleshooting	14



Unpacking and Powering the Product

The product comes boxed with a USB lead.



You will need to purchase 2 Alkaline AA batteries to power the unit Unscrew the battery cover using a small Philips screwdriver.





Insert the batteries as per the directions on the battery compartment Replace and screw down the battery cover The unit is now ready for use



Installing the Software

Locate a suitable PC running the latest version of Windows 10. The software has been extensively tested on this platform and no guarantee can be given as to successful operation on other platforms. The software will not run on Android or IOS platforms Download the software

Double click on the software to install – if there are any safety warnings then please click to clear

Open the file browser and navigate to the SEP software

Double click to open and extract to the desktop. You may be prompted to install a suitable set of software for extraction

The software is now ready to use

Configuring the EvaluatIR

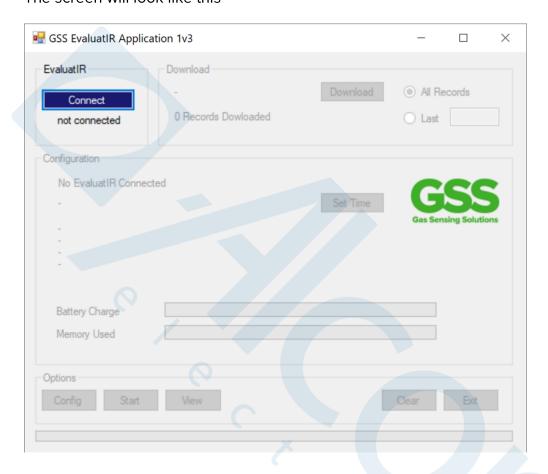
Plug the Evaluation platform into the supplied USB lead and plug the lead into the PC where the software is installed.

The green LED will now illuminate

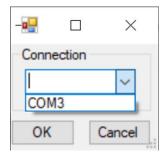




Double click the software to launch the application The screen will look like this



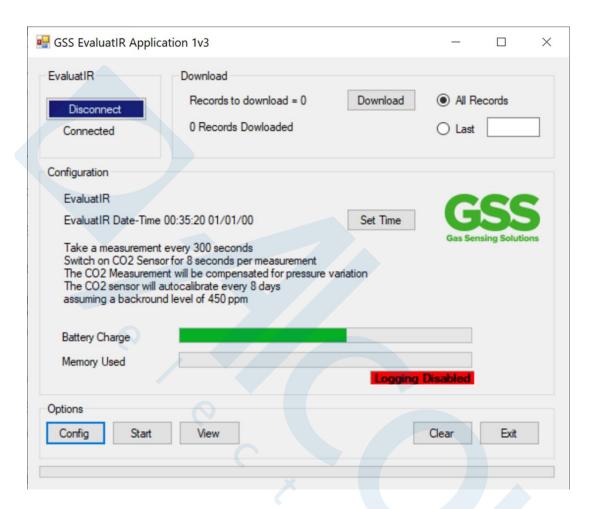
Click on the Connect button to access the pull down menu Click on the pull down menu to access the communication port that the Evaluation Platform is connected to. It may not appear as COM3 but if you are unsure of what communication port the platform is attached to then go to the "device manager" on your machine and plug / unplug the EvaluatiR. This will show you which port the device is connected to.



Click connect



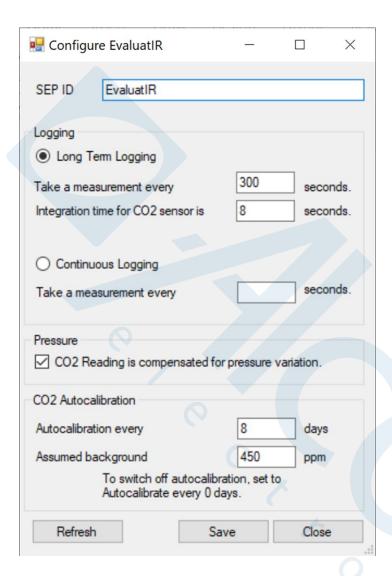
The application will now show the unit is connected, the battery level and the memory status.



If this is a new setup or new batteries have been installed the time field will be showing zeroes

Push the set time button to set the Evaluation Platform clock to the PC time. Note that this will now run independently and is used to time stamp the internal measurements for subsequent read out. It will not be updated with respect to PC time or daylight saving time unless the set time button is pushed with the unit connected to the PC The default configuration for the Evaluation Platform is shown in the display. If the default configuration is to be changed click on the "Config" button to display the setup screen.





The ID of the Evaluation Platform may be set to a user requirement by deleting and reentering a specific ID. This will be output on the retrieved file data to indicate where the data was retrieved from. This is subject to a maximum character length of 20. The Evaluation Platform can then be set up to log and average at specific intervals – the logging period and the integration (averaged) time can be set It can also be set to free run where a non-integrated (averaged) measurement of all sensors at a specific time.

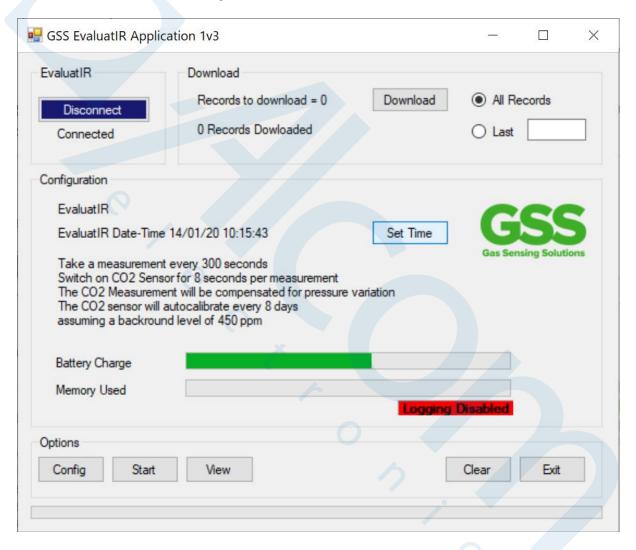
The sensor can also be set up to provide a pressure compensated CO2 value. This uses the internal pressure sensor to compensate the CO2 value for any pressure variations. Note that this is only used to correct the output when it is downloaded It can therefore be changed to download both corrected and uncorrected versions of the same dataset.



The Evaluation Platform can also be set to force a background zeroing of the sensor to a user defined value at a period set by the user

Once the values are set, they may be saved by hitting the save button. Cancel exits without saving, Refresh updates the values to the last saved configuration.

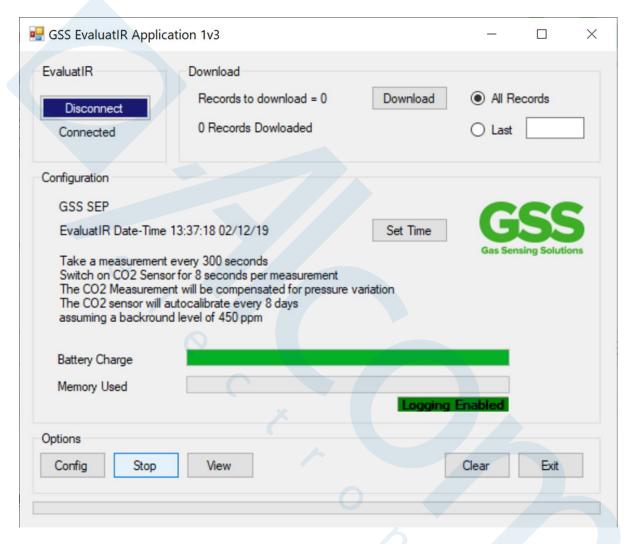
On Saving the application will return to the default screen and show the updates to the Evaluation Platform configuration.





Recording Data

Once the Evaluation platform has been configured it can now be used to record data Push the start button and the Evaluation Platform will start logging indicated by the logging enabled script in the application.



The evaluation platform can now be disconnected from the USB and will record data autonomously

The LED will flash briefly at a reading point. Note that if the measurement interval is long then this will happen infrequently.



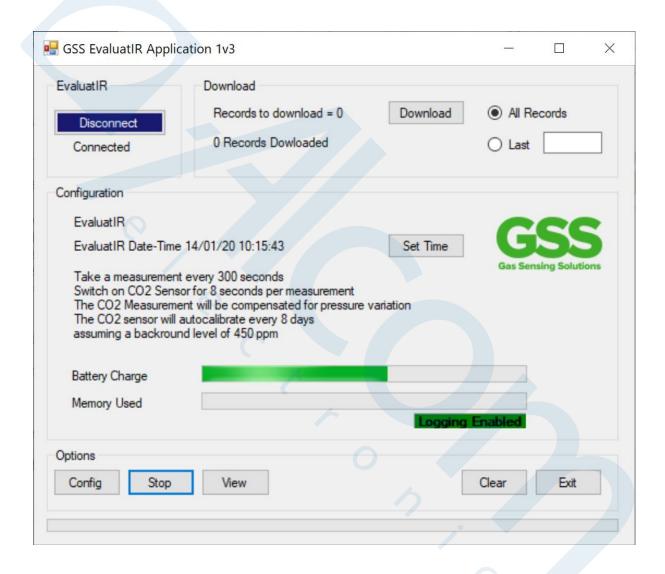
Retrieving Data

Launch the application as before

Plug the USB lead into the Evaluation Platform and the PC

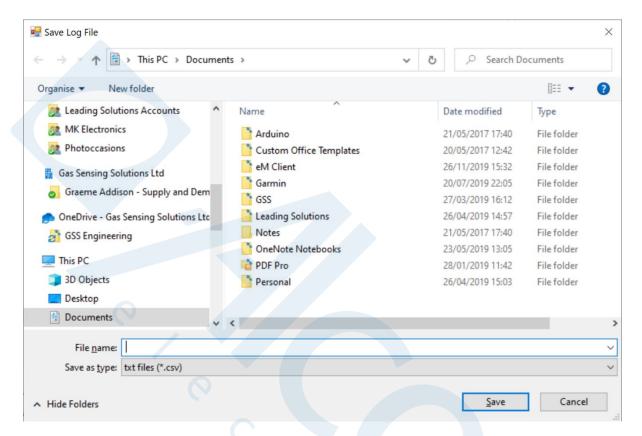
Connect as before

The APP will show the number of data points that have been stored since the Evaluation Platform was armed (started).





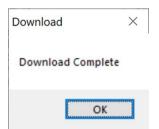
The download can be set to retrieve either all records or a number of last records. Select the download button. The next screen will ask for a location to save the file to and the file name.



Once these have been input select the save button

The data will now download, and the green progress bar will move across the lower screen. When complete a box will appear indicating that download is complete. This can be cleared as required

Note that if a file name that is already is use is used then the data will be appended to the old file.

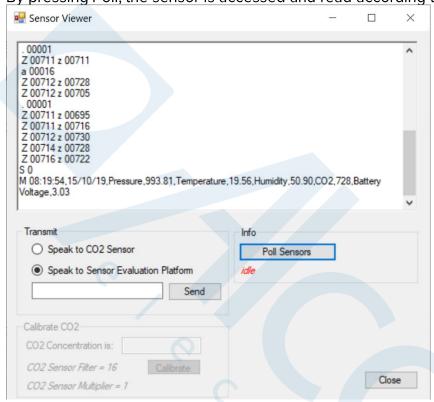


The data file can now be accessed via a spreadsheet solution for subsequent analysis



Advanced Functions – for Experienced Users Only

The Evaluation Platform provides a gateway to the sensor advanced setting functions By pressing the "View" button the sensor screen is accessed By pressing Poll, the sensor is accessed and read according to the setup parameters



Specific commands can be sent directly to the sensor or via the EvaluatIR. Please see the user manual for the specific sensor fitted for details of these commands



Troubleshooting

The EVALUATIR can be configured easily and will operate "out of the box" In the event of any issues please try the following troubleshooting steps:-

Unit does not log	Check batteries are correctly inserted	
	Replace batteries	
	Check settings	
	Check logging is enabled	
Unit does not retain real	Check batteries are correctly inserted	
time clock settings	Replace batteries	
Unit does not connect to	Ensure software is installed correctly – if necessary, please	
PC	de-install and re-install as required	
	Check the correct com port has been selected as per the	
	device manager note above	
Unit flattens batteries	Set logging to a longer period to reflect the measurement	
prematurely	frequency required	

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