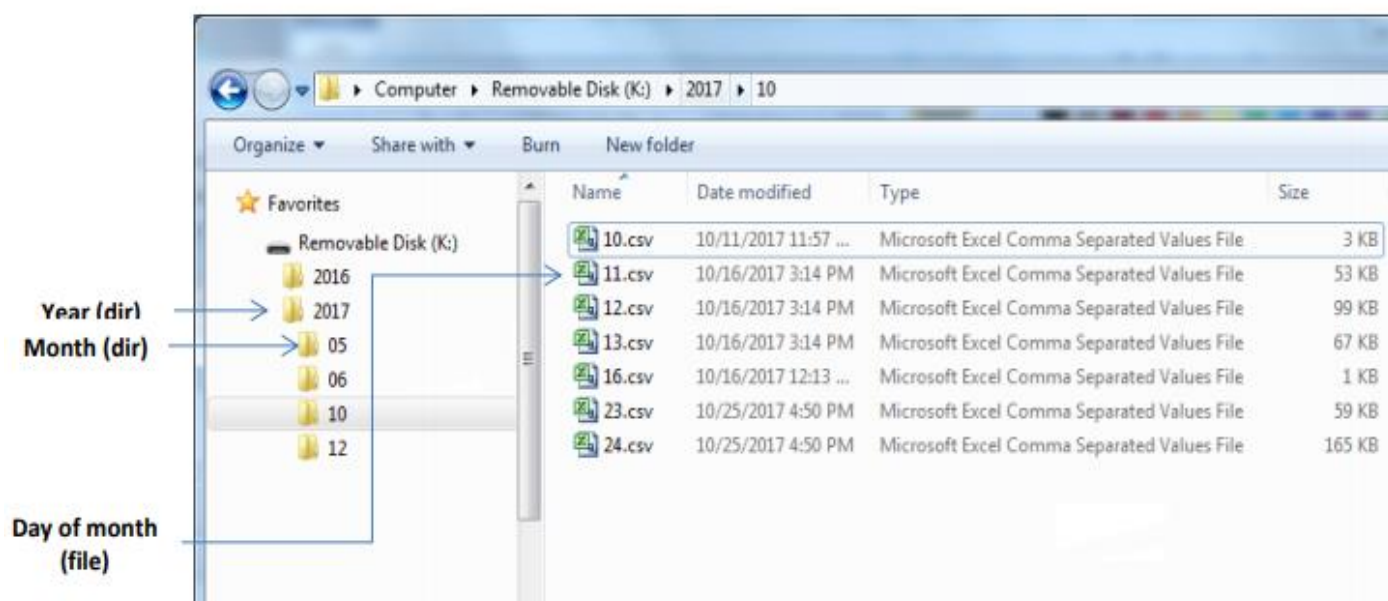


D16 Portable Gas Monitor - Data Logging

Directory Structure

Logged gas readings are stored in files and are accessible over the USB data connection using a file browser like *Microsoft File Explorer*. The files are maintained in a calendar based directory structure to make them easy to find. The year directory is at the top, and log files appear in the month directories below it. Filenames are simply the day of the month on which a collection of samples were taken, with a .csv extension. Changing the date after logging has been started will change the file where readings are placed. Be sure to set the correct date and time, if necessary, before starting the data logger.

The example in Figure 16 illustrates how 7 files created in month 10 (October) of 2017 might appear.



File Structure

A data log file is a collection of readings recorded in a single day. They are ordered in time, from top to bottom, and grouped into sessions. A session begins when data logging is started, and ends when it is stopped. A sensor information header always precedes the gas readings. Since the header includes the "Range" of the sensor, changing this setting while logging will create a new sensor information header.

Figure 7 below is an example of a data log file opened directly with *Microsoft Excel*.

The screenshot shows a Microsoft Excel spreadsheet with the following data and annotations:

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	D16 PortaSens3 (100) ← Device name and serial no.												
2	12/6/2017 ← Date												
3													
4	CI2 20.0 PPM (00-1003/H10-11-3942) ← Sensor, first session.												
5	Time	Reading											
6	14:12:21	0.08											
7	14:12:31	0											
8	14:12:41	0											
9	14:12:51	0											
10	14:13:01	0											
11	14:13:11	0.6											
12	14:13:21	0.5											
13	14:13:31	0.6											
14	14:13:41	0.8											
15	14:13:51	0.9											
16	14:14:01	1											
17	14:14:11	1.1											
18	14:14:21	1.1											
19	14:14:31	1.2											
20	14:14:41	1											
21	14:14:51	0.9											
22	14:15:01	0.6											
23	NH3 1000 PPM (00-1011/H10-15-2750) ← Sensor, second session.												
24	Time	Reading											
25	14:21:01	64											
26	14:21:12	20											
27	14:21:22	14											
28	14:21:32	12											
29	14:21:42	11											
30	14:21:52	11											
31	14:22:02	0											
32	14:22:12	0											
33	14:22:22	0											

Annotations and their corresponding data points:

- Device name and serial no.**: Points to cell A1 (D16 PortaSens3 (100)).
- Date**: Points to cell A2 (12/6/2017).
- Sensor, first session.**: Points to cell A4 (CI2 20.0 PPM (00-1003/H10-11-3942)).
- Gas name, full scale range, units of measure (part no./model no. - gas no. - serial no.)**: Points to cell A4.
- Gas readings from the sensor immediately above.**: Points to cell B6 (0.08).
- Time in 24 hour format (fixed).**: Points to cell A6 (14:12:21).
- Gas units same as full scale range.**: Points to cell B6 (0.08).
- Sensor, second session.**: Points to cell A23 (NH3 1000 PPM (00-1011/H10-15-2750)).
- Can be the same as, or different from, the previous sensor.**: Points to cell A23.
- Gas readings from the sensor immediately above.**: Points to cell B25 (64).