

The Helios Range

Helios Datalogger Data formats

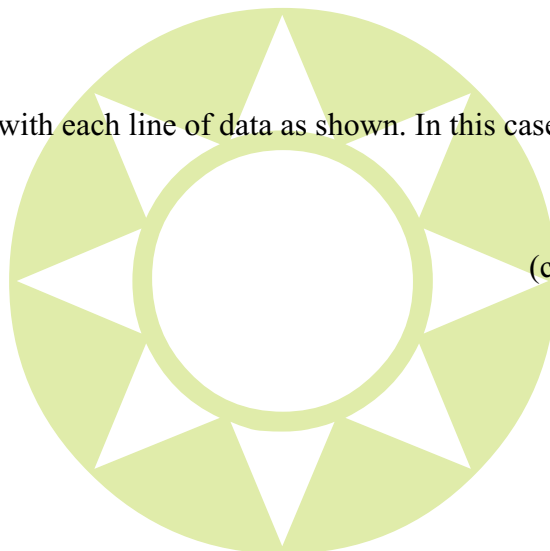
The Helios loggers can be offloaded with either with the Skye Helios software or your own communications software, such as Windows HyperTerminal. There will be a slight difference in the offloaded file, as explained below:

DATA OFFLOADED USING SKYE HELIOS SOFTWARE:

<u>Data</u>	<u>Explanation</u>
Skye Instruments	Our name!
HeliosMini V#100	Software version number
HeliosMiniDemons	DataFile identifier - 16 characters
46284	RH 'high' calibration point
49497	RH 'low' calibration point
00210) other calibration points
12345) other calibration points
12345) other calibration points
12345) other calibration points
00030	Logging interval code
11926	Memory fill information
08.448	Battery voltage
15:14:31 05.02.03	Logger time & date

Time	Date	Air/RH%	Air/DegC	LeafWet	Rain/mm
Start of Data					
16:30:00	15/10/2002	47.4	21.375	00.0	0.0
17:00:00	15/10/2002	46.4	22.125	00.0	0.0
17:30:00	15/10/2002	47.6	21.188	00.0	0.0
18:00:00	15/10/2002	48.2	20.875	00.0	0.0
18:30:00	15/10/2002	48.7	20.438	00.0	0.0
19:00:00	15/10/2002	48.7	20.063	00.0	0.0
19:30:00	15/10/2002	48.7	19.688	00.0	0.0
20:00:00	15/10/2002	48.8	19.375	00.0	0.0
End of Data					

The Helios software puts a date and time stamp with each line of data as shown. In this case the logging interval is 30 minutes.



(continued)



Helios Datalogger Data formats (cont)

DATA OFFLOADED USING HYPERTERMINAL:

<u>Data</u>	<u>Explanation</u>
Skype Instruments	
HeliosMini V#100	
HeliosMiniDemos	
46284	
49497	
00210	
12345	
12345	
12345	
00030	
12124	
08.480	
15:30:30 05.02.03	
16:19:00 15.10.02	Time logging was initiated
00030	Logging interval
0047.6 021.37 00000 00000	Readings from each channel
0046.6 022.12 00000 00000	
0047.8 021.18 00000 00000	
0048.3 020.87 00000 00000	
0048.9 020.43 00000 00000	
0048.9 020.06 00000 00000	
0048.9 019.68 00000 00000	
0049.0 019.37 00000 00000	
OK.	

In this case the Helios has offloaded its memory without any formatting (usually done by the Helios software). It shows the time at which logging was initiated, followed by the logging interval, followed by a line of data all of the sensors at each logging interval.

The Helios will always log at set times, e.g. if the logging interval is 30 mins, logging will always occur at 00 and 30 mins of each hour; if the logging interval is 20 mins, logging will always occur at 00, 20 and 40 mins of each hour, etc.

So in the above example, logging was initiated at 16.19.00 hours, with a 30 minute logging interval. So the first data record was stored at 16.30, and each line in turn is 30 minutes later.

If the logger detects an interruption in the logging sequence (e.g. if the logger is offloaded) then it inserts a new time to show when logging begins again.