

PhotoGetData

PhotoGetData manual

Version 1.02



1 Document history

Rev	Chapter	Description of modification / changes	Date
1.00		Initial release.	04/02/2014
1.01	All	Document modified due to software release.	04/06/2014
1.02	2	Improve warning visibility	17/07/2014



2 **Requirements**

To retrieve data from a Photometer to a PC, you need to connect it to the PC through either an USB cable or a Serial/DCP cable.

Note:

• In old PC, the standard Serial com port design can perturb the communication. In this case, it's advised to use an USB-to-Serial adapter to link the PC and the Sun Photometer through the DCP.

Warning:

The USB communication must not be used as a permanent link. If the Photometer is always plugged to a computer through an USB cable, it can't execute the daily backup of its internal memory on the SD card.

A text file "ScnList.dat" is used to describe and decode each scenario. This file must be in the same folder than "PhotoGetData.exe".

🧐 PhotoGetD)ata						
<u>File T</u> ools <u>D</u> a	ta <u>H</u> elp						
Dpen K8 Save	K8 Con	figuration Clea	< rall				
Type 9	Gize	Date/Time		Data			
Latitude:	unknown	Number:	unknown		Get records		
Longitude:	unknown	Records:	unknown				
Device found		14:16:10					

3 PC Connection

3.1. **USB connection**

Choose "Tools\Configuration\Communications" and select "USB" in communication Type combo box.





Plug-in the Photometer to the PC through an USB cable and wait for Windows to begin its driver installation process.

If the USB driver is unknown for Windows, please follow the chapter "3 USB driver installation". After, follow the next instructions.

Wait until the end of the driver loading. The Sun Photometer's SD card is seen as a mass storage and must be present in "My computer".

Note: Only one instance of the driver can be loaded at a time.

When the Photometer is connected to a PC, a (U) suffix is added at the end of the time at the root menu.

3.2. Serial/DCP connection

Choose "Tools\Configuration\Communications", select "Serial" in communication Type combo box and the COM port in the Port combo box.

Configuration						
Data	Communication					
Communications						
	Туре	Serial	~			
	Port	COM1	*			
		COM1				
		COM2 COM15				

4 USB driver installation

If the driver installation process fails, go to "device manager", right click on "Cimel Sun Photometer" and choose "Update Driver Software…"

Choose "Browse my computer for driver software". Navigate to the "USB drivers" directory and select it. Press "Next" and when the "Windows security" window appears, choose "Install this driver software anyway".

Wait for the end of the installation procedure.



5 Scenario list organization

PhotoGetData contains the full list of loaded scenarios. This list is displayed in PhotoGetData with the more recent scenario on top of the list and the older on bottom.

6 Open/Save K8 file

6.1. **Open**

To open a binary file (*.k8), press "File\Open K8" and navigate to the desired file. After open action, the current full list scenarios is replaced by the *.k8 file scenarios list. The previous full list is lost.

6.2. **Save**

To save the full list as binary file (*.k8), press "File\Save K8" and choose the output directory and the file name.

7 Export files

The scenarios can be exported in Binary and ASCII files. The period for this export is user selectable in "Tools\Configuration\Data".

Recording period					
💿 None	🔘 Monthly	🚫 Retrieval date			
🚫 Daily	🔘 Annual				
_					
L	OK Ca	ncel			

The name of the exported data is dependent of the selected option.

- None:
 - > SP81TTVVNN_nnnn.* (.K8, .STA...).
- Annual:
 - > SP81TTVVNN _nnnn_YYYY.* (.K8, .STA...).
- Monthly:
 - > SP81TTVVNN _nnnn_YYYYMM.* (.K8, .STA...).
- Daily:
 - > SP81TTVVNN _nnnn_YYYYMMDD.* (.K8, .STA...).
- Retrieval date:
 - > SP81TTVVNN _nnnn_YYYYMMDDhhmmss.* (.K8, .STA...).

Where:



- SP81 TTVVNN:
 - > 81: Photometer family.
 - > TT: Photometer subfamily.
 - > VV: Software major version.
 - > NN: Software minor version.
- nnnn: Optical head number
- YYYYMMDDhhmmss
 - > YYYY: Year
 - > MM: Month
 - > DD: Day
 - > hh: Hour
 - > mm: Minute
 - > ss: Second

The name of each created files depends of the record date and of the recording period except for "Retrieval date". In this case, the name of each created files is based on the PC date.

8 Data retrieval

When scenarios are retrieved from a Photometer, they are appended to the current displayed list.

To avoid duplicate scenario, PhotoGetData stores the date of the last retrieved scenario in an "ini" file.

Note: If the Optical head number of the current full list is different than that in the plugged Sun Photometer, the current full list will be replaced by the new Sun Photometer Scenarios after retrieve data.

8.1. *Manual*

To get scenarios from the Photometer, you must connect the PC to the Sun Photometer through an USB or a Serial/DCP cable.

Press the "Get records" button. The PhotoGetData software asks scenarios from the Photometer one at a time.

If success, all received scenarios are appended to the full list. In the other case, no scenarios are appended. A new "Get records" command should be used to retrieve data.

8.2. Automatic

PhotoGetData software can retrieve data automatically.

Open "Tools\Configuration\data".



Automatic recording					
🗹 Enable	🔲 Create K8	Create ASCII			
Directory		Browse			
Start time	09:00:00				
Period	1 Hour 💌				

Select "Enable", choose the output directory, the start time and the periodicity. Select "Create K8" and / or "Create ASCII" to generate automatically the K8 and ASCII files respectively.

Only data retrieved are appended to the output files and the Recording period is applied.

Note: If the "directory" field is empty, the output files are stored in the same folder than PhotoGetData.