



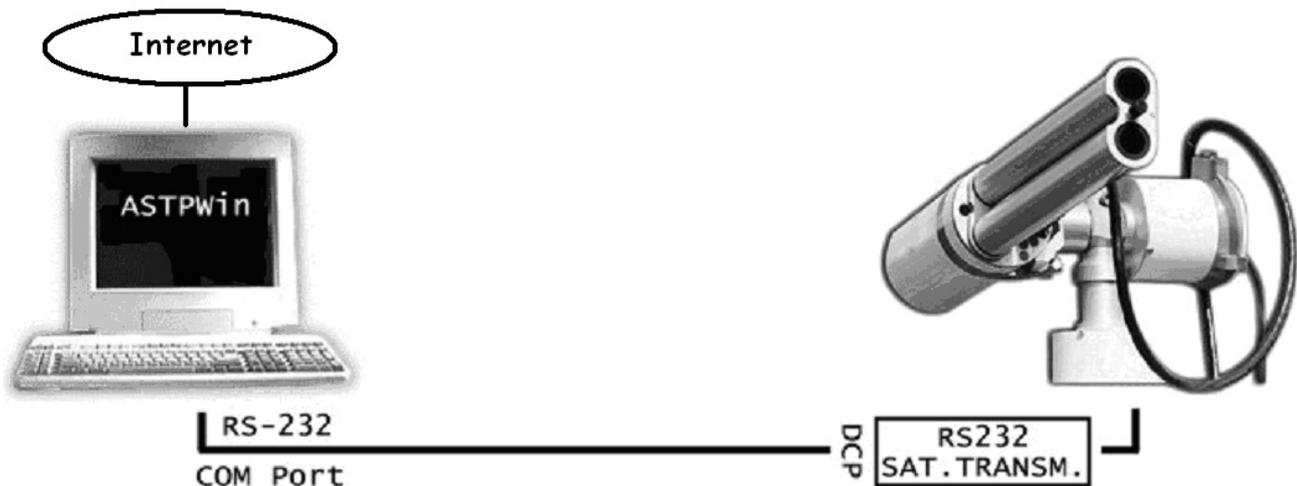
# Automatic procedure to send data of a Sunphotometer (.K7) by E-mail.

Apsdosem  
V1.2

## Introduction

The sunphotometer memory can contain at least a day of measurements. To recover in an automatic way the data, without any user intervention, a satellite transmitter is often used. But how to get the data into a PC without any transmitter and send these data by e-mail?

## Connection diagram



At first, your photometer must be connected to a PC with DCP-PC cable and the PC connected to Internet. For a correct operation of data transfer it's better to use Windows XP/NT/2000/Mil or 98 in the PC. If ASTPWin program isn't in the PC you can download it on the web site of CIMEL and install it: [http://www.cimel.fr/photo/software\\_us.htm](http://www.cimel.fr/photo/software_us.htm)

## Setting up the instrument

You have to modify the actions list, so the instrument knows how to run the PC scenario. Here is the way to add a "PC scenario" action:

	23/04/99 13:53 PW MAN SCN VIEW	Select the password menu (PW).
	13:55:47 PW 0 Pass Word - +	Select the n°2 by pushing two times on [R] to go in the user actions menu.
	n:01/27 13:59:49 01=>255 FF:FF:FF	The 26 first actions are free for the user. Edit the first action by pushing on [W].
	n:01/27 14:01:00 01=>255 12:FF:FF	Edit the time chosen for the PC scenario execution with [Y] and [R], go to the next field by pushing on [W].
	n:01/27 14:01:31 01=>255 12:05:00	Then edit the minute and the second with [Y] et [R]. Go to the next field by pushing on [W].
	n:01/27 14:02:02 01=>015 12:05:00	Choose the ID number of action to run (Refer to the sunphotometer documentation for the actions list) in that case, the ID number of the PC transmission is the fifteenth action (015). Validate the whole user action and exit the edit mode by pushing on [G].

## Known limits

The photometer must be in **automatic mode**

The PC action must be planned between the first and the last scenario of the day, every action planned outside these limits will be ignored (for example, it's impossible to run a scenario at midnight). The additional actions should be ideally launched between 9h and 15h. **We often use 12:05:00 TU.**

The used actions must be sorted in **increasing order** to be launched correctly. Example : It's not allowed to set the 2nd user action at 10h30 if the first user action is planned at 11h30. In that case, the two actions must be swapped.

## Setting up the PC

For a successful transmission, ASTPWin must run and the communication port must be opened.

In the "Communication" tab of the "General setup" menu:

- Select the good port and choose 1200 bauds for the speed.
- Select "Optimise transmission" to transmit only the new scenarios.

To execute ASTPWin every time the PC start, create a shortcut to ASTPWin in the Windows "startup" group and activate the "automatic connection at the start" option in the "General setup" menu of ASTPWin to open the communication port automatically.

For an automatic storage of data in the hard disk, go in the "Data" tab of the "General setup" menu:

- Activate the automatic recording in the following directory. **C:\photo-dt\base\envoyer** Every transmission will create a K7 file, which will be stored in that directory.
- You **don't select** the option to create automatically the ASCII files because we don't need these files.
- Put in "Base name" **Pxx\_** or **Pxxx\_** with xx or xxx the photometer number

## The automatic transfer of data (.K7) by e-mail

Open the **K7bymail-pro.zip** file in a temporary directory or introduce setup CDrom into your reader.

Launch the **install.bat** file and provide the requested parameters

- The site name
- Smtip to send the automatic emails. Generally smtp.yourprovider.country or yourprovider.country. For example smtp.mail.yahoo.com
- The sender's address of the e-mails. Generally it's your address.
- The address e-mail to be sent in copy. In this version, the only possibility of to know if the mail was sent, to add your address e-mail in copy. The system sends obligatorily the data to [blarel@loa.univ-lille1.fr](mailto:blarel@loa.univ-lille1.fr) (To check). You can put other e-mail (separated by a comma).

If you made an error you can start again the installation or to launch the program **makeparfile.exe** (see at the end of page : possible problems)

If your PC contains the Win98/95 and Millennium system launch **onlywin98.exe**

The sending program **C:\photo-dt\base\k7bymail.bat** will run automatically every hour. It will send an e-mail at LOA (with [phdata@loa630.univ-lille1.fr](mailto:phdata@loa630.univ-lille1.fr)) if there are some data file (P\*.k7) in **C:\photo-dt\base\envoyer**. These data will be in AERONET database approximately 2 to 3 hours later.

The k7 files will be sorted out in a base under **C:\photo-dt\base\**. If the name of the configuration "Pxxx\_" or "Pxx\_" is respected, a directory will be created with just the number of each photometer. If not they will remain in the **C:\photo-dt\base\envoyer** directory.

To check and stop the global procedure (**C:\photo-dt\base\k7bymail.bat**), go to Task Manager of Windows.

If the automatic system of transfer doesn't work you can put manually a planned task for this program **C:\photo-dt\base\k7bymail.bat** every hours or days (as you want).

### Possible problems:

- If your parameters (SMTP or your e-mails) are not OK or the connection doesn't exist, the files aren't sent and wait in **C:\photo-dt\base\envoyer**. The file **C:\photo-dt\base\mail-auto-error.txt** contains the information concerning the last transition and possibly the errors.
- You can test the transfer without any planned task. You execute only **C:\photo-dt\base\k7bymail.bat**.
- Here you can find the programs list (C:\photo-dt) to solve your problems:
  - makeparfile.exe : make the parameters file
  - makebatfile.exe : make the file **k7bymail.bat** that send the k7 file
  - makeat.exe : make the at-cmd.bat with the at (task planned) commands (WinXP/NT)
  - at-cmd.bat : make the commands of planning to launch the file **k7bymail.bat** (WinXP/NT)

If you change the parameters with **makeparfile.exe**, you must remake **k7bymail.bat** with **makebatfile.exe**  
**Important : When you just activated this process, send me an e-mail to announce the start.**