

Instructions for Sunways Solar Inverter software updates

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1. Introduction

This document contains detailed instructions for software updates for Sunways Solar Inverters of the following types:

- NT series 900 V (NT 2500...NT 5000)
- NT series 900 V (NT 10000...NT 12000)
- AT series (AT 2700...AT 5000)
- PT series (PT 30k, PT 33k)

Each Solar Inverter contains three different software packages:

Name	Abbreviation	Function
Communication Software	COM	Data Logger, display, integrated web server
Web Interface	WIF	Contains the contents of the Sunways Browsers
Control Software	Control	Control and monitoring of the Solar Inverter

Please note:

- In case of update installations, please make sure to keep all updates (COM, WIF and Control software) on the latest software release available.
- If you operate several devices of different types in a network, updates should always be applied to all devices. The use of different software versions in a network should be avoided.
- While the update is in progress, any interruptions of the power supply must be avoided, because otherwise the software may no longer start correctly.
- Please reset the Inverter after all software updates are finished by disconnecting AC for a minimum of 5 seconds

I. Current software versions

Model	Communication ("COM")	Control software ("Control")	Comments
AT 2700...5000	0004.0003	004.000	
NT 2500...5000	0002.0009	004.000	
NT 10000...12000	0002.0008	004.000	
PT 30k / 33k	0004.0004	002.014	Serial number Index A
	0004.0004	003.004	Serial number Index B

System requirements:

Operating system: Windows XP SP3, Windows 7 (Windows 7 not for AT Software < COM 3.5 und PT < COM 4.0)

Browser: Mozilla Firefox from V 3.6

Java: from V6.0

II. Update matrix

The following table provides an overview of the available software updates. Please update the software **in the order of the list**, for inverters which are installed in your PV plant. Please also note the additional comments in the right column.

Model	Software	Update File	Comments
AT 2700...5000	1. COM	AT_COM_3_5_to_4_0.gz	For versions <3.x contact our Hotline Please refresh website (F5) after installing AT_COM_3_5_to_4_0.gz. Then proceed in the emergency page with AT_COM_4_1.gz
		AT_COM_4_3.gz	Please update AT_COM_4.2.gz twice in order to ensure the installation on both boot sectors Please press F5 after each COM update to refresh the browser
	2. WIF	AT_WIF_LNG_1747.gz	If the emergency pages were visible during the COM update, do not press F5 after the WIF update. Instead click into the address bar of your browser and press enter.
	3. Control	AT_Control_4_0.gz	In case no message appears after the update, please check the version after a few minutes in the dialog „software update“
NT 2500...5000	1. COM	NT5_COM_2_9.gz	Please install this twice in order to assure to overwrite both boot sectors properly. Please refresh the page (F5) after the COM update
	2. WIF	NT5_WIF_LNG_1782.gz	Please refresh the page (F5) after the WIF update
	3. Control	NT5_Control_4_0.gz	Only for inverters >= Control 2.11
NT 10000...12000	1. COM	NT12_COM_2_8.gz	Please install this twice in order to assure to overwrite both boot sectors properly. Please refresh the page (F5) after the COM update
	2. WIF	NT12_COM_2_8_WIF.gz	Please refresh the page (F5) after the WIF update
	3. Control	NT12_Control_4_0.gz	Only for inverters >= Control 2.11
PT 30k...33k	1. COM	PT_COM_4_0_M.gz	Only for masters with COM 3.x
		PT_COM_3_to_4_0_S.gz	Only for slaves with COM 3.x
		PT_COM_4_4.gz	For master and slave inverters beginning at COM 4.x
	2. WIF	PT_COM_4_4_WIF.gz	
	3. Control	PT_Control_2_14.gz	Only for inverters with Serial number index A
PT_Control_3_4.gz		Only for inverters with Serial number index B	

2. Calling the Sunways Browser

Open the start page of web browser for the single unit/master by specifying the IP address. Access requires authentication. Enter the following data in the password dialog

User name: customer
Password: ***** (eight asterisks)

Note: If you have changed the password, please use the new data.

3. Software update – general procedure

Depending on the number and types of Solar Inverters, several steps may be required.

- A **single unit** can be updated directly (see section 4.)
- To update several devices in a **CAN network** proceed as follows:
 1. Update the master (see section 4.)
 2. Update slaves from the same series (see section 5.)

Attention: Please be aware to conduct the now following steps individually for the COM, WIF and Control update in the afore mentioned order of the updates. Moreover you can find the correct order of the updates also in the update matrix (1.III).

4. Software update for a single unit or master

From the start page use this button



to access the settings. Click on Software Update to open the following window:



AT series, PT series (COM < 4.0)



NT series, AT series, PT series (COM >= 4.0)

All current software versions are listed. The actual software update procedure involves two steps:

1. Update

To carry out an update, click on "Browse..." to select a file. If required specify the destination for the update.

The update files for the respective device series are provided in the form of "gz" archives on the Sunways website at www.sunways.de. The archives should not be extracted before the update. Instead, the complete archive should be uploaded.

For AT units and PT with COM < 4.0 the update files for the control software have the extension *.bin.

Start the file transfer by clicking on "Update". Select the option for automatic restart after the update ("Restart" or "COM Reset"). During the update the display shows a status message (see manual for explanation). After a successful update a notification window opens.

Note: Please do not use the Sunways Browser during update process to avoid problems.

2. Rebooting the communication unit

The restart takes about 15 seconds. During this time the Sunways Browser stops responding. Refresh the web page and clear the browser cache. This procedure is required in order to display modified web page content correctly. Reloading the web page alone is not sufficient.

Firefox:

Select Tools > Clear Recent History: Tick the box for Cache and click Clear Now.

Internet Explorer:

Select Tools > Internet Options: In the General tab, Delete Files button, tick Delete All Offline Content and click OK.

Opera:

Select Tools > Delete Private Data. Individual selection: Select Cache

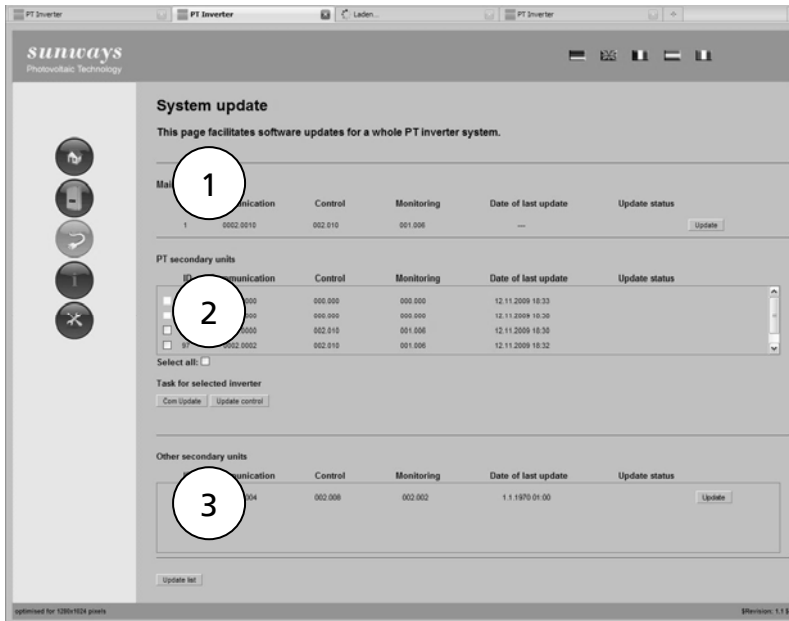
Note: The inverter continues to feed into the grid during the update of the communication software and the restart. However, feeding is interrupted during a control software update.

5. System update in a CAN network

In a CAN network it is possible to update the software for the slaves from the master.

Click on System, then System Update, to call up the next page with an overview of the devices in the CAN network.

I. Older version: AT, PT series (COM version < 4.0)



1

Section 1: Master

This section provides information on the software status of the master. Click on Update to open the dialog box for updating the master.

Section 2: Slaves

2

This section provides information on the software status of Solar Inverters from the same device family in the CAN network. Tick the checkboxes for the required devices or select all (recommended).

Click on Comm. Update and Control Update to update the respective software. The communication software is distributed from the master to the respective slaves. The control software first has to be uploaded. Click on "Browse..." and select a file. The selected devices are then updated successively. If the update is successful the message "updt. OK" appears.

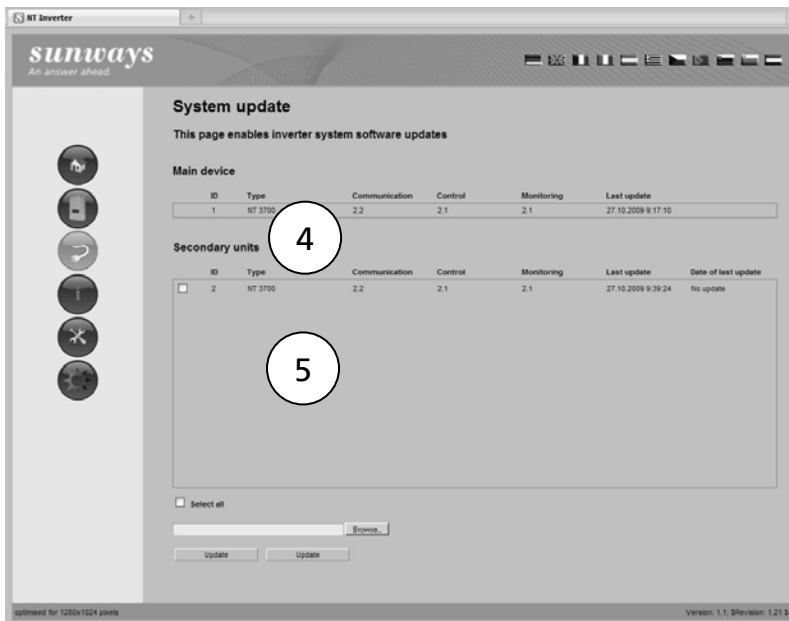
Please note: If a device is in overnight shutdown mode, the update automatically takes place the next day. The control software update does not continue after an overnight shutdown.

Section 3: Other slaves (PT and AT < 4.0)

3

The Update button links to the dialog box for updating another slave separately. The procedure is described in more detail in section 0

II. New version: NT, PT and AT series (COM version >= 4.0)



Section 4: Master

4

This section provides information on the software status of the master. To access the dialog box for updating the master select Menu/Settings/Software Update

Section 5: Slaves in a CAN network

5

List of all slaves. For the update tick the checkbox for devices from the same series, then select the update file for this device series by clicking on the "Browse..." button. Click on Update to start the update. Basically it is possible to update all devices included in the slave list.

Please note: Only devices that are not in overnight shutdown mode can be updated. Devices that are in this mode are not listed in the slave list.

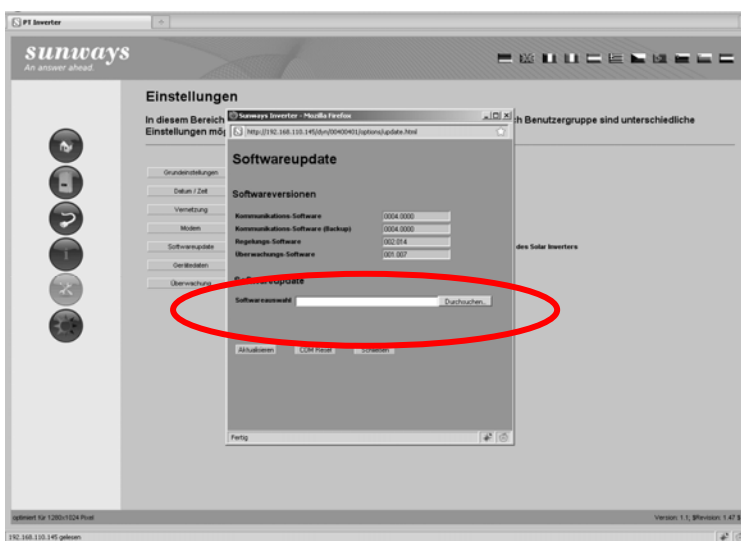
6. Software update PT and AT series from COM 3.x to 4.x

Due to extensive revisions (including integration of the String Box CAN) in the new software version 4.0, the update process involves several stages.

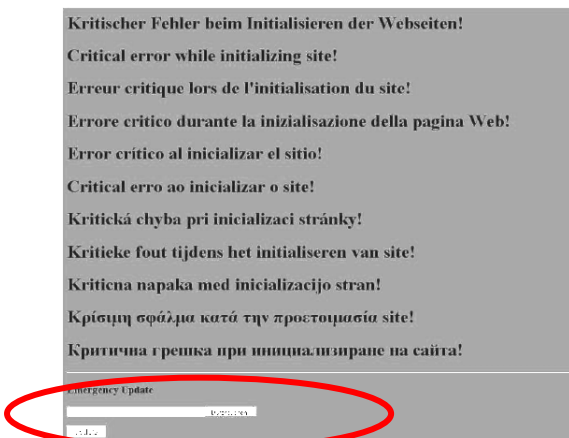
Please note: Due to necessary modifications in the data logger concept any existing files containing measured data have to be converted to the new system. Files for minute values and error data cannot be converted and will no longer be available after the software update.

I. Master software update (Settings - Software Update)

1. Update of the software [PT COM 4 0 M.gz](#) (with PT) resp. [AT COM 4 0.gz](#) (with AT) via menu «Settings» - «Software Update»



2. Once the Sunways Browser has been restarted and the cache has been emptied (see above), a web page appears through which the next update, [PT COM 4 3.gz](#) (for PT) resp. [AT COM 4 3.gz](#) (for AT) can be updated.



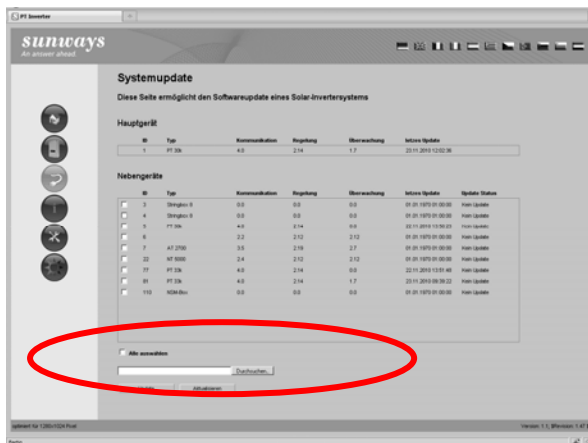
Please wait for 1 to 2 minutes, until update status OK is shown.

The screen shown under 2. will appear again. Here you can update to [PT_COM 4 3 WIF.gz](#). and by AT [AT_WIF LNG 1747.gz](#)

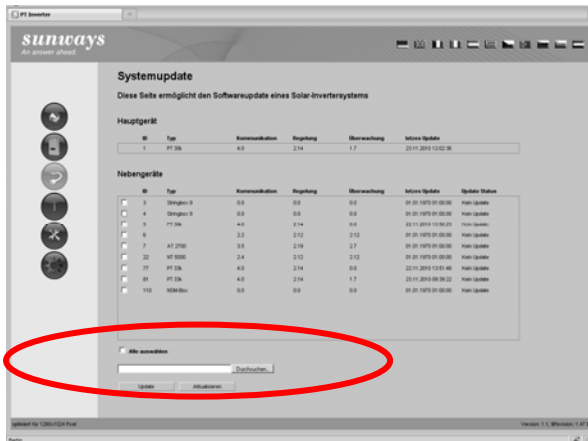
3. repeat step 2. to update also the secondary boot sector with the latest software.

II. Slave software update (System > System Update)

- Update of the Software [PT_COM 3 to 4 0 S.gz](#) (for PT slaves) resp. [AT_COM 3 5 to 4 0 S.gz](#) (for AT slaves) via menu «System» - «System Update». Select all PT resp. AT series devices. If the software is already up-to-date, an Update Error will appear in the system list:



- Update of the software [PT_COM 4 3 WIF.gz](#) (for PT) resp. [AT_WIF LNG 1747.gz](#) (for AT) via menu «System» - «System Update». Select all PT series devices:



Notes

If the system update should not work correctly or if you have a very large PV plant, you should update all slave inverters separately. To do so, please connect your PC to every inverter separately.

Other AT and NT slave inverters should also be updated to the latest versions.