

Manual On how to install and use the power model

In order to be able to complete the following steps and to include the power model, Anaconda needs to be installed correctly. A manual on how to install Anaconda can be found on this page.

1. The first thing that needs to happen is to "trust access to the VBA project object model". To do this go to Options → Trust Center → Trust Center_Settings → Macro Settings. Here you check the checkbox "Trust access to the VBA project object model".
2. Go to your anaconda prompt.
3. Activate the environment in which you want to install the Xlwings software. If you have only the (base) environment, you can of course ignore this step.
4. Install Xlwings with the following line of code `conda install xlwings`
5. The Excel add-in will be automatically included when running the following line: `xlwings addin install`
6. The easiest way to implement later the Excel file with the proposed power model is to now make an Xlwings quickstart project. This can be done as follows: `xlwings quickstart myproject` You can before running this code for example change the directory to 'Desktop': `cd Desktop`
7. Now it is time to download the model. You can find it on the following Github page.
8. Download the folder "myproject" and replace the folder in the directory where you made the quickstart project by this folder.
9. In this folder you will find an excel file and .py file with the same name as this folder. You can now open this Excel file. Make sure you "Enable contents" when Excel gives this notification.
10. Give in your own preferred field width, field length, number of users, and antennas. If wished, other parameters can also be changed.
11. You are now able to calculate the consumed power by filling in some parameters and clicking the "Calculate Power" button.