

# **JsunnyReports manual**

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2009 © Martin Kleinman

<http://www.familie-kleinman.nl/jsunnyreports>

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## **What is it**

JsunnyReports is a tool for creating graphs and html files with data taken from one or more inverters. It can generate various types of graphs including :

- bar charts ( year / month yield )
- dial type grahs ( current inverter output )
- line type graphs ( day graph / actual graph )

## **Featurelist**

- Multiple inverters support including
  - Almost all SMA type inverters ( the SMA inverters that can be attached to a Sunny Beam display, including the Bluetooth versions)
  - Diehl inverters
  - Fronius inverters
  - Solarlog type loggers
  - Manual input from an Excelfile
- Calculation of savings including various different prices over the years
- Giving estimates for a year how the installation is performing in kWh/kWp
- Highly configurable, by using templates which can be modified by the user
- Its FREE!
- And some more :-)

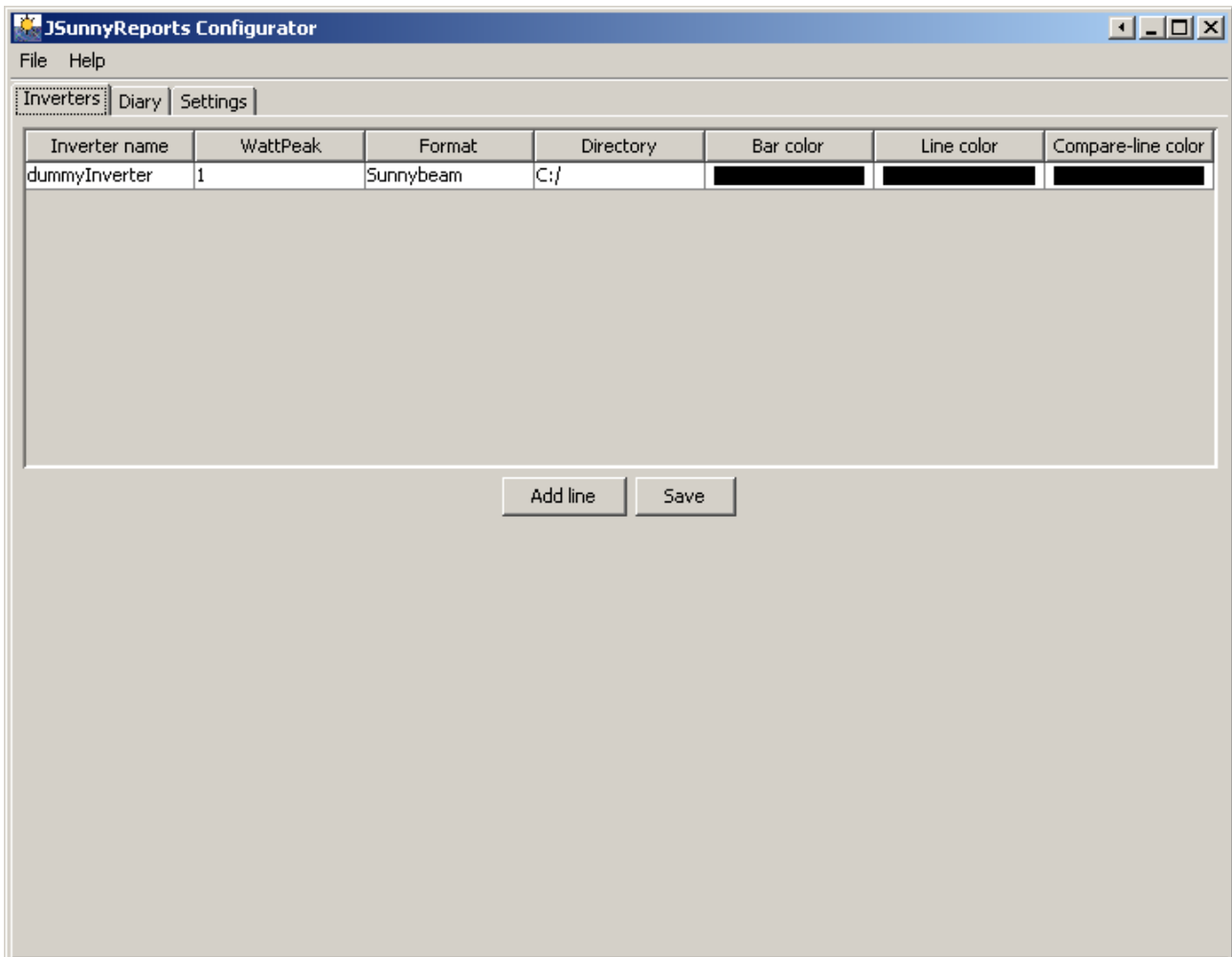
# Configuration

After downloading and unpacking the zip file in any directory you will see the following files on your system.

→ insert picture here

Before JsunnyReports can be used the application has to be configured to work properly.

Just start the configuration tool by starting “config.cmd”. You will see the following screen.



## ***Inverter configuration***

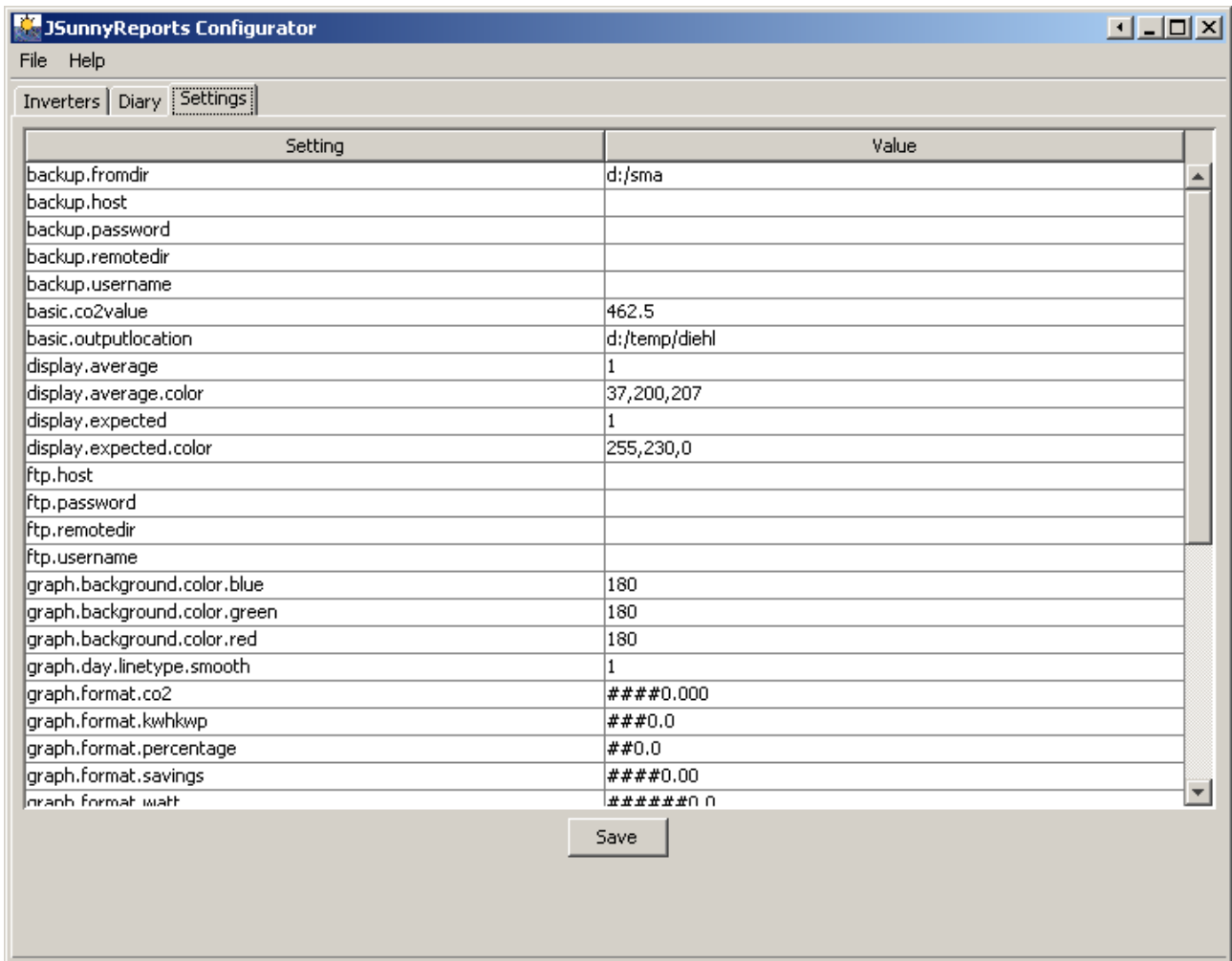
There is one default dummy inverter present. With 1 Wp installed. SunnyBeam format, with all colors black.

Modifying these values should be fairly straightforward.

When you're done press the “Save” button.

## ***Settings configuration***

Go to the settings tab. You will see the following screen.



The settings are in alphabetical order at this stage. This might look a bit confusing and will probably change in future revisions.

### Outputlocation

This is the most important option to modify. Set this location to the place where you want to store the outputfiles generated by JsunnyReports. Please use the forward slash “/” when setting the directory.

### FTP

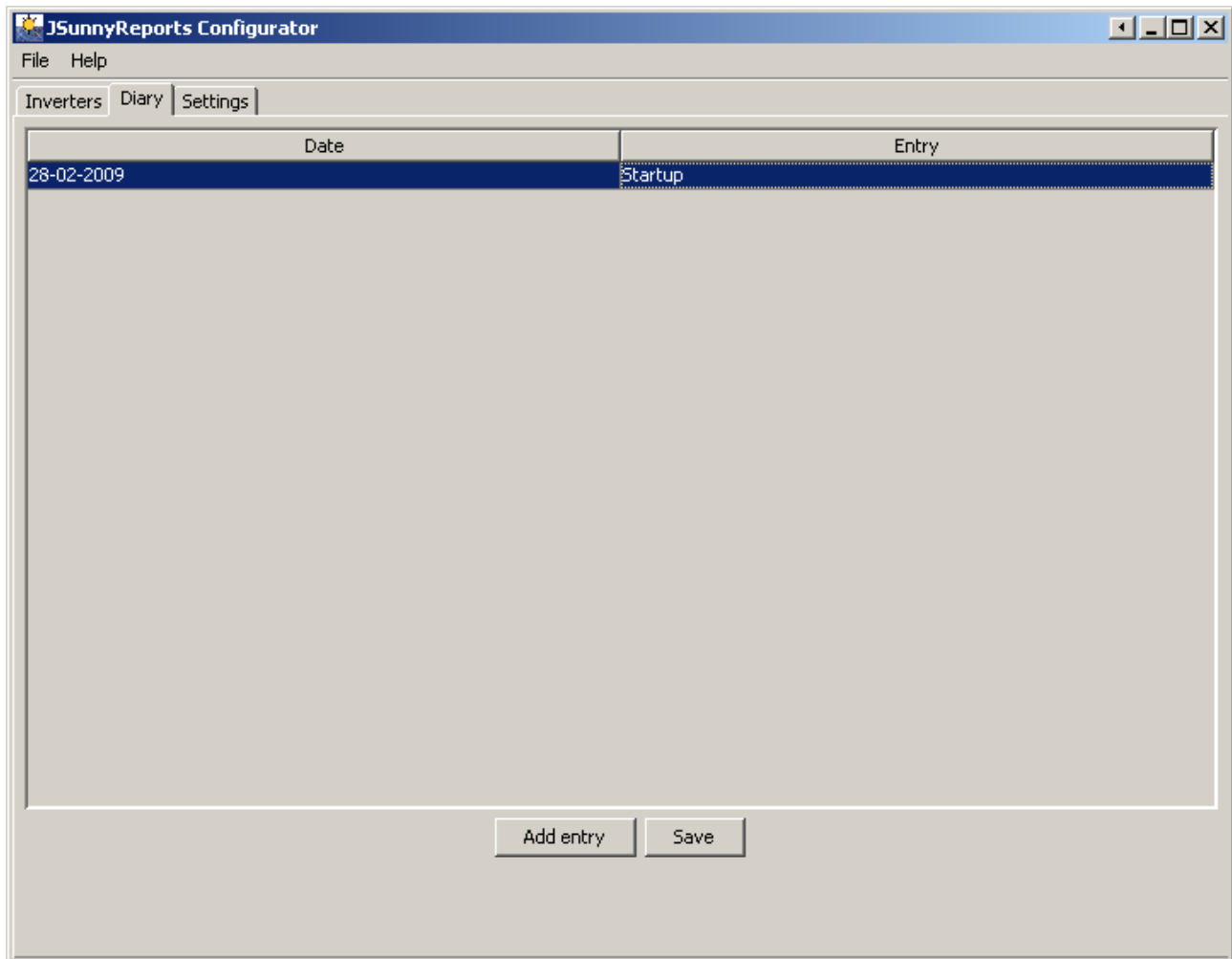
When you want to use the FTP function in JsunnyReports you will have to fill in the ftp.host, ftp.password, ftp.remotedir and ftp.username items for instance :

Ftp.host	Ftp.someserver.com
Ftp.username	myusername
Ftp.password	qwerty12345
Ftp.remotedir	/wwwroot/jsunnyreports

For all the other options see the section “Advanced settings”

When you're done press the “Save” button.

# Diary



This diary gives you the opportunity to add interesting dates to your website. These items will be saved on a separate diary page.

Please note that for now the date field is NOT sorted!!!!

## Cost setup

Another interesting feature of JsunnyReports is the extended cost / savings support. An Excel sheet named costs.xls is provided.

On each line the following information is entered

- date from
- date till
- electricity cost for each kWh
- extra incentive ( subsidie ) for each kWh e.g. Given by the government or a 3<sup>rd</sup> party

Note : make sure the periods ( from till ) do not overlap

# Templates

All the HTML files that are used by JsunnyReports are highly configurable. In fact you can influence 99.5% of the actual layout! The only limitation is the naming of the html pages itself and the links back and forth to the various pages.

This is done by using a very simple template system. In your program directory/templates you will find files like index.template, month.template, Diary.template and year.template. These 4 files are the main template files that are used.

These files are simple text ( html ) files with the extension .template. You can edit them in any text program you like.

The template system works as follows.

## Tags

In all the template files you will find entries like `##some_text##`. This `##.....##` is called a tag. These tags are replaced by JsunnyReports for usefull information. For instance an image, highest yield, result table and so on.

The current list of tags is still fairly limited more tags will be added in the future. If you want a specific tag implemented LET ME KNOW! :-).

### ***index.template***

Supported tags

<b>Name</b>	<b>meaning</b>
<code>##years_image##</code>	Replaced by years.png
<code>##image_currentyear##</code>	Replaced by the year image of the current year.
<code>##image_currentmonth##</code>	Replace by the current month image of the current year
<code>##image_actual##</code>	Replaced by actual.png
<code>##years_table##</code>	Replaced by the years table giving you all the details about all the years.
<code>##lastupload##</code>	Last uploaded date
<code>##day_yield##</code>	Day Yield
<code>##expected_yield##</code>	What is expected for a year for all the monitored PV.
<code>##kwh_current_year##</code>	How much kWh is produced for this year.
<code>##kwh_total##</code>	Total amount of kWh
<code>##footer##</code>	Standard footer on every page.

## ***year.template***

Supported tags

<b>Name</b>	<b>meaning</b>
##year_image##	Image of current year
##topyear_image##	Gives you an overview of the best day of each month for that year.
##year##	Replaced by the year text e.g. 2009
##year_table##	Gives an html table with all the information about the production in that year for each month.
##footer##	Standard footer
##inverter_table##	Specific information on each seperate inverter for that year.

## ***month.template***

Supported tags

<b>Name</b>	<b>meaning</b>
##footer##	Standard footer
##month_image##	Image of that month
##year##	e.g. 2009
##month##	e.g. 12 for december
##inverter_table##	Specific information on each seperate inverter for that month.

## ***Diary.template***

Supported tags

<b>Name</b>	<b>meaning</b>
##footer##	Standard footer
##diary_table##	Giving you the diary

## Advanced settings

All the settings are stored in a file called settings.ini which can be found in the /conf directory of JsunnyReports.

**backup.fromdir**  
**backup.host**  
**backup.password**  
**backup.remotedir**  
**backup.username**

These settings can be used to backup a specific directory, and subdirectories, to a location on an ftpserver. This can be usefull if you want to backup the logfiles created by an inverter. If left blank JsunnyReports will ignore these settings.

**basic.co2value**

This setting is used to calculate how much CO2 is saved with the PV installation. The value is the amount of grams of co2 produced for each kWh.

**basic.outputlocation**

Location where the outputfiles, html, png of JsunnyReports should be stored.

**display.average**  
**display.average.color**

Settings for average values on the month graphs. Display.average ( 1 = true, 0 = false ) determines if you want to display this or not. The color states the used color. In rrr,ggg,bbb format ( r = red, g = green, b = blue ). for instance ( 255,255,240 ) for a very bright yellow.

**display.expected**  
**display.expected.color**

Similar settings as above, these are used for the expected values.

**ftp.host**  
**ftp.password**  
**ftp.remotedir**  
**ftp.username**

FTP settings, used for uploading all the html and png files to an ftpserver.

**graph.background.color**

Determines the backgroundcolor of all the graphs. Default is 180,180,180 which is a dark grey background.

**graph.day.linetype.smooth**

Determines if the dayGraph should be “smoothed” 0 = false, 1 = true. I personally prefer this setting to be on.

**graph.format.co2**  
**graph.format.kwhkwp**  
**graph.format.percentage**  
**graph.format.savings**  
**graph.format.watt**  
**graph.format.yearexpected**  
**graph.format.yield**

These items all indicate a specific formatmask. These settings determine how the various numbers are displayed on the graphs and in the html tables.

# = any number from 0,9  
0 = always a zero here even when there is no entry  
. = a dot ;)

for instance.

##.### as formatmask and 0 as input would give "0"  
##.000 and 0 would give ".000"

### **install.expectedkwhkwp**

This settings determines the amount of kWh you expect for every kWp you have installed. Default is 750.

This would mean that if you have 1000Wp installed you would expect 750kWh.

For The Netherlands 850 is the default value for the SDE.

This entry is used for calculating the expected yield for a month.

**month.1**  
**month.10**  
**month.11**  
**month.12**  
**month.2**  
**month.3**  
**month.4**  
**month.5**  
**month.6**  
**month.7**  
**month.8**  
**month.9**

These items indicate the amount ( in percentage ) of the total kWh production you expect in that month. These defaults are taken from the PVGIS database and should be okay for most people.

When you do change them. Please note that all 12 entries must add up to 100% !!!!!!!

