

Niphargus & Shrimp "collections" User guide v1.0

1. Shrimp setup



Before plugin a Niphargus for the first time, it is best to install the measurements downloading application "Shrimp". The installation is straightforward, and its duration will depend on the software components previously installed on the system. The Niphargus drivers (FTDI virtual serial port) will also automatically install at the end of the setup (see below). Follow the screen instructions to install the drivers.



Once installed, Shrimp icon look like this :



You can now plug-in a Niphargus and start the program. The first plug-in of a Niphargus on an new computer can take a few seconds ("new hardware detected" pop-up). Once the "new hardware" is installed properly, the Niphargus is ready to use.



2. Connect a Niphargus to Shrimp

Once shrimp has started, click on "Connect Niphargus" to initiate the communication with the logger, Shrimp will then scan the computer communication ports to detect a Niphargus. If the detection fails, maybe the Niphargus is still not ready to communicate, wait a few seconds and retry. Wait typically 2-3 seconds between the plug-in of a Niphargus in the USB port and the connection in Shrimp.



3. Download a log from the Niphargus

Once connected, click on "Download from Niphargus" to download the recorded data. The download can take up to 40sec if the memory is full (13000 date-time-temperature-relative humidity values). Once downloaded, a preview of the data appears on the chart. You can then save the data by clicking on "Save the log to .csv file". The csv file is a semicolon separated value file than can be opened in excel. Temperature values are expressed in °C and relative humidity in % with decimal separated with a point.



Tip: If Excel does not separate correctly the columns, you can set regional parameters (in Windows Control Panel – Language and Region – Additional settings).

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Région et langue	X					
Formats Emplacement	Claviers et langues Administration	-1	Nombres Symbole monétaire Heure Date			
Format			Exemples			
Anglais (Royaume-Uni)			Positif : 123,456,789.00 Négatif :	-123,456,789.00		
		Nonbres Exempt				
- Formats de date et	d'heure	Positif				
Date courte :	jj/MM/aaaa 🔹	Sym	Symbole décimal :	· •		
Date longue :	jj MMMM aaaa 🗸 🗸	Nor	Nombre de décimales :	2 🗸		
Heure courte :	Heure courte :		Symbole de groupement des chiffres :	· •		
Heure longue :	HH:mm:ss 🗸	For	Groupement des chiffres :	123,456,789 👻		
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Que signifie la nota	ation ?	CNI	Format de nombre négatif :	-1.1 🔹		
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Decimal symbol should be set to point ".", and list separator set to semicolon ";"

Typical log file should look like this :

- A header with metadata on the recordings,

- 3 columns with date-time stamps, measured temp and relative humidity.

1	<header></header>						
2	<id-niphargus>NIPHARGUS #23</id-niphargus>						
3	<date_on>12/7/2015<td></td><td></td></date_on>						
4	<interval>10</interval>						
5	<voltage>3.182 V</voltage>						
6	<number_of_records>78</number_of_records>						
7	<firmware version="">1.702</firmware>						
8							
9	<comment1></comment1>						
10	<comment2></comment2>						
11				-			
12	DateTime	MeasuredTemp	MeasuredRH				
13	12/07/2015 11:52	24.93	47.75				
13 14	12/07/2015 11:52 12/07/2015 11:52	24.93 24.96	47.75 47.01	_			
13 14 15	12/07/2015 11:52 12/07/2015 11:52 12/07/2015 11:52	24.93 24.96 25.06	47.75 47.01 46.87				
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13 14 15 16 17 18 19 20	12/07/2015 11:52 12/07/2015 11:52 12/07/2015 11:52 12/07/2015 11:52 12/07/2015 11:52 12/07/2015 11:53 12/07/2015 11:53 12/07/2015 11:53	24.93 24.96 25.06 25.11 25.15 25.19 25.2 25.2 25.2	47.75 47.01 46.87 46.71 46.5 46.04 45.94 45.94				
13 14 15 16 17 18 19 20 21	12/07/2015 11:52 12/07/2015 11:52 12/07/2015 11:52 12/07/2015 11:52 12/07/2015 11:53 12/07/2015 11:53 12/07/2015 11:53 12/07/2015 11:53	24.93 24.96 25.06 25.11 25.15 25.19 25.2 25.2 25.2 25.2	47.75 47.01 46.87 46.71 46.5 46.04 45.94 45.94 45.96 45.37				

3. Start a new measurement with the Niphargus

To start a new series of measurements, click on "Start new logging". The following box appears to choose a measurement interval. For each interval choice, the maximum duration of measurements before the Niphargus memory if full is calculated (end of measurement date-time). Note that Calendar and advanced setting tabs are not yet implemented.

🖳 Timespan		1							
Interval Calendar Advanced settin	ngs								
Interval: 0 🜩 Secon	ds 20 🚔 Minutes	0 🖨 Hours	0 🚔 Da	ys					
Measurements until: Thursday 03/12/2015 12:44:06									
			Cancel	Start					
			x						
Starte	a								
	Niphargus is recordi	ng with a timestep of 1	200 sec						
	~								
			ок						

Tips :

- Minimal measurement interval for this version of the Niphargus is 5 seconds, if a shorter interval is chosen, Niphargus will automatically switch to 5 seconds interval.

- The Niphargus only start to record temperature & humidity once unplugged (led flash every 10 seconds). Avoid keeping the logger plugged on the USB port for a long time, it will drain the batteries quicker.

- Minimum battery voltage for logging operation is 1.9v (2x0.95v).

- A new series of measurements automatically erase the previous data recorded by the Niphargus! Be sure to save the previous log to a file before starting a new measurement!