# Firmware Update iMETOS 3.3 & ECO

Created by: Davide Tabarelli Modified on: Mon, 27 Mar, 2023 at 7:07 AM

## To update the Firmware of a station you need:

- 1. Pessl Instr. Firmware Uploader (FW Uploader)
- 2. mini USB cable to connect the main boards to the PC or Notebook
- 3. jumper (jumper RM2,54)
- 4. latest version of the Firmware (FW) for the main board

## You can download the FW here:

(https://support.metos.at/a/solutions/articles/15000049569?lang=en&portalld=1500000447)

(https://cloud.metos.at/index.php/s/jw5Q46NGDHRRoBc) (https://cloud.metos.at/index.php/s/jw5Q46NGDHRRoBc)

## You can download the FW Uploader here:

(http://metos.at/de/manuals/) (https://cloud.metos.at/index.php/s/4RSjxAYa3WXgakB)PI FW Uploader (https://cloud.metos.at/index.php/s/kYHo3MnkopfBfWZ) For more information or help please read

Download PI FW Uploade (https://support.metos.at/en/support/solutions/articles/15000049760)r in our solutions.

To manually upload the firmware on the station, please follow the given next steps:

- 1. Unplug the battery and solar panel.
- 2. Connect the PC to the station (USB Cable yellow circle) and put the jumper on the boot pins (red circle) Make sure that there are not other USB cables connected to your PC.
- 3. Plug in the battery (blue circle).



METOS 3.3 motherboard



*iMETOS ECO D3 motherboard* 

4. The motherboard now **starts** in **boot mode**, **Yellow LED** in the middle is on (see red circle below). If the station is not in boot mode, press **Reset** button on the board (see yellow circle below).





- 5. Open the program Firmware uploader
- 6. On **"Select FW"** sellect the **correct FW** for the station e.g: Firmware\_iMetosEcoD3\_1.603.20220823.binary

🏋 Firmware uploader v. 1.161 Release

	Show supported boards
Uploader	
Select FW	Upload FW
Device:	- select - V
Office:	Weiz
Serial number:	00000000 O New O Manual  O Don't use
COM Port:	COM1   Baud: 19200   Open Port
	Jump to FW

### 7. On "Device" select the correct device

	Show supported boards	for LoRa boards
loloader		Setup Board
opioadei		Target Country: EU1
Colort EV/	Helend Elvi	Setup channels
Select FW		Provision on TTN
Device:	- select -	Auto Save Log File
Office:	- select - Crop VIEW DUAL	Clear Log before EW Uploa
Serial number:	CropVIEW ZOOM New Manual Don't use	Set and Print Sensor Conf
COM Port:	iMetos 3.3 Open Port	
COMPOR.	iScout	
	iMetos AO Track Jump to FW	Dark Mode
	nMETOS100+	
	LoRAIN (LoRaWAN)	
	LoRATH (LoRaWAN)	
	uMETOS NBIoT	
	uMETOS SOIL (LoRaWAN) uMETOS SOIL (NBIoT)	
	LoRAIN SOIL (LoRaWAN)	
	Camera Control Unit	
	PI54-D (sensor)	
Cond Data:	Clear	
bibl bild	Clear	
	Deatherstein	
	Bootloader password	

8. On "COM Port" Select the correct COM Port. If it is the only one device connected to your PC, COM port is detected automatically.

	Show	v suppor	ted board	İs			-for LoRa	a boards		
Uploader							✓ Set	tup Board		
							Target	Country:	EU1	~
Select FW						Upload FW	⊻ s	etup chan	nels	
Device:	- select -						✓ P	rovision o	n TTN	
Device.	- 301001 -		×				A 🗹	uto Save l	.og File	
Office:	Weiz	~					I ⊂ C	lear Log b	efore FW	Jpload
Serial number:	0000000		⊖ Ne	w O M	lanual	Don't use	⊠ S	et and Priv	nt Sensor (	Conf.
COM Port:	COM1	$\sim$	Baud:	19200	$\sim$	Open Port				
	COM1									
	COM2					Jump to FW	🗌 D	ark Mode		
	COM3 COM4	45								
	COM5									

#### 9. Click "Open Port"



#### Firmware Update iMETOS 3.3 & ECO : Pessl Instruments GmbH

#### 10. Click "Upload FW"

	Show supported boards	for LoRa boards
Jploader		Setup Board
		Target Country: EU1
Select FW	Iloads\Fimiware_iMetos3.3_8.603.20220823.binary	Setup channels
Devices	iMeteo 2.2	Provision on TTN
Device.	Invetos 5.5	Auto Save Log File
Office:	Weiz ~	Clear Log before FW Uploa
Serial number:	00000000 O New O Manual  O Don't use	Set and Print Sensor Conf.
COM Port:	COM3   Baud: 115200   Open Port	
	lump to FW	

- 11. After "Firmware successfully uploaded", the board **automatically restarts** and starts communication with the server. Wait until the first communication ends.
- 12. As soon as you see the message "Firmware successfully uploaded", you're done. Please leave the battery connected for 24 hours. Connection with the server will be established after a while.



Example for communication with the Server

13. To leave the boot menu/boot mode click "Close Port" and remove the Boot jumper from the board.

Uploader	
Select FW	s\FW\Firmware_iMetos3.3_8.503.20190429.binary Upload FW
Device:	iMetos 3.3 🗸
Serial number:	00000000
COM Port:	COM3 V Baud: 115200 V Close Port
	Jump to FW

14. Remove the USB cable and press reset (RST yellow circle) on the



## board.

#### Important note:

The **complete monitoring** of the communication process should take place **after each installation** by connecting the PC to the iMetos. The installer should **never leave the site without performing a sensor test and communication process log** 

- To double check if the update of the serial number was successful follow the next given steps:
- Open the PI Service Terminal
- Connect the PC to the board via USB cable and connect the battery.
- Then click "Connect".
- Wait until the Main Menu appears or press "H"
- Press "1 SYSTEM" and then "1 QUICK VIEW"
- Now you see at "FW Version:" the actual version of your firmware
- At "Serial number" you see your actual serial number.
- Press now on "Disconnect" and unplug the USB cable and the battery

D Davide is the author of this solution article.