

# Minikin SP1

Battery replacement



*EMS Brno, July 2022*

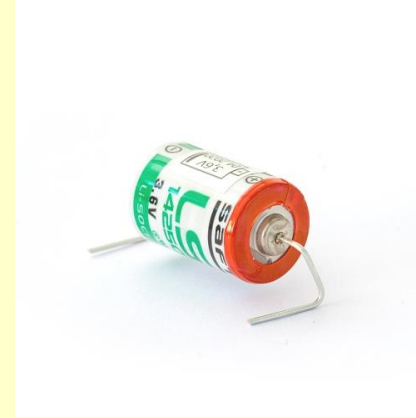
# Related tools and accessories:



Minikin SP1



IrDA/USB cable



Battery for screwless terminals



Dessicant bag



Minikin opener



Tweezers

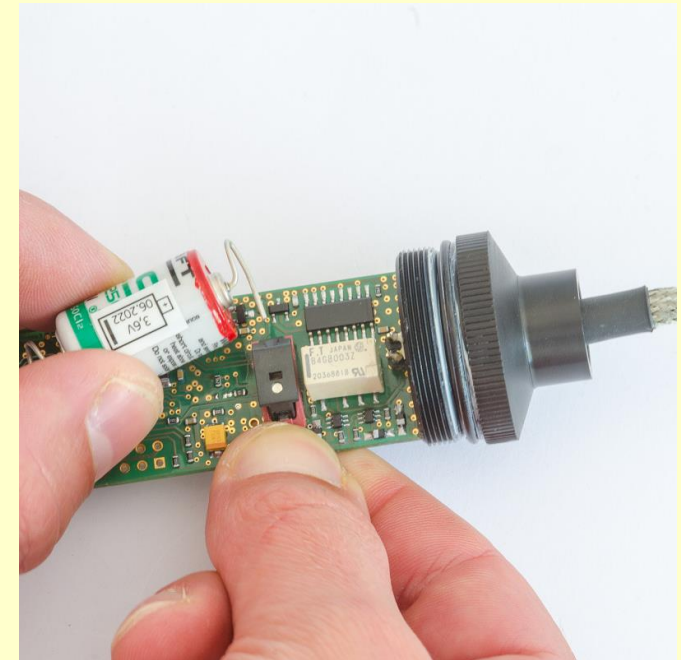
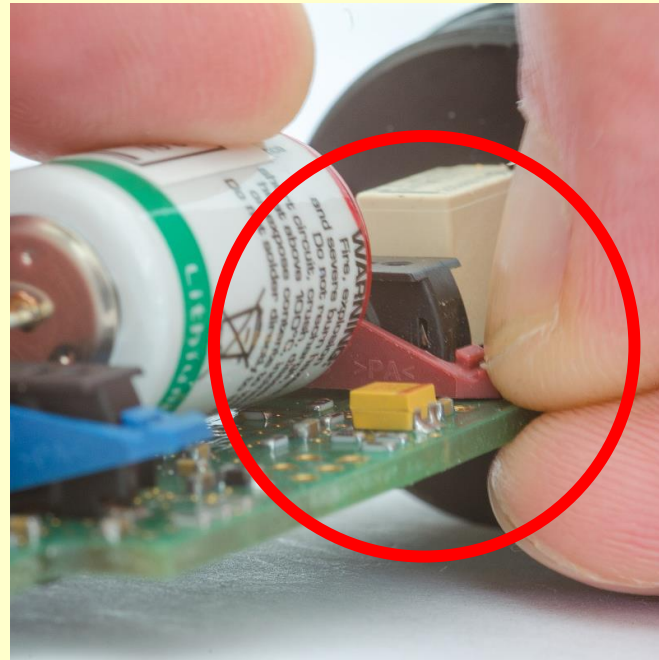
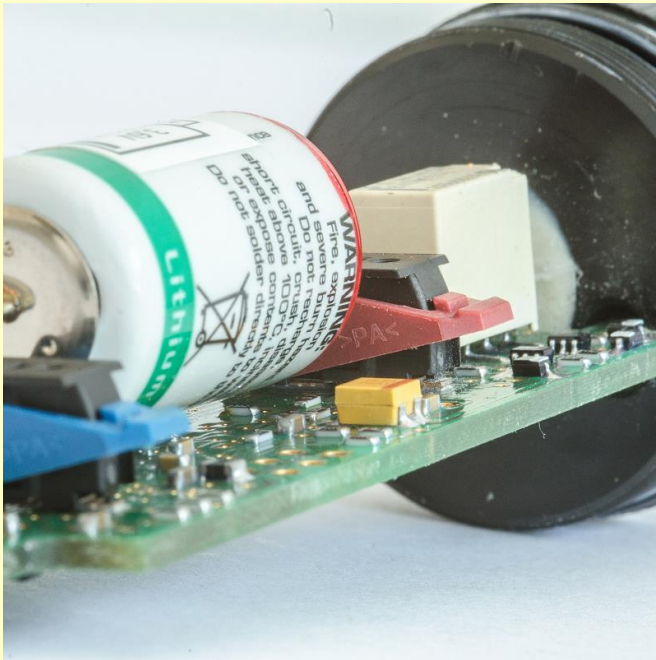
# Electronics removal

- Loosen the black “head” of datalogger by Minikin opener
- Screw out the black “head” from the stainless case and carefully pull out the electronics.



# Battery removal

- Remember the battery polarity.
- Push-in the positive (red) spring clamp battery terminal and extract the battery wire.

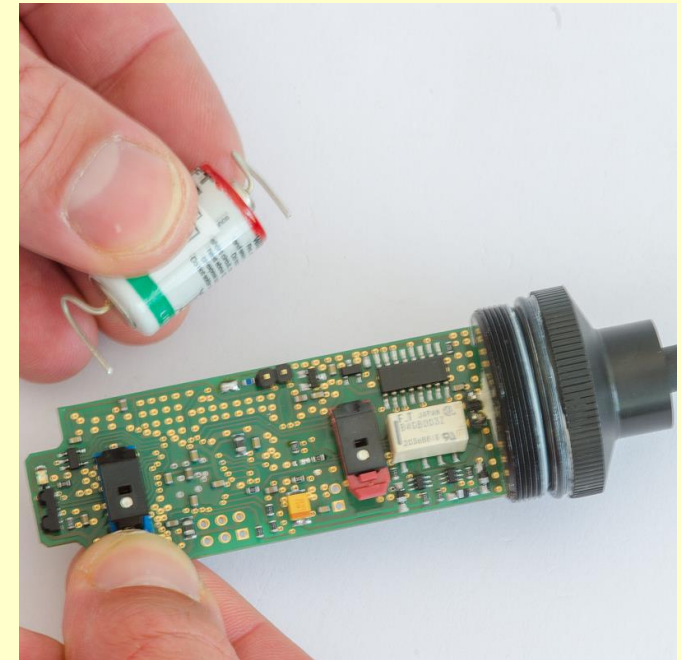
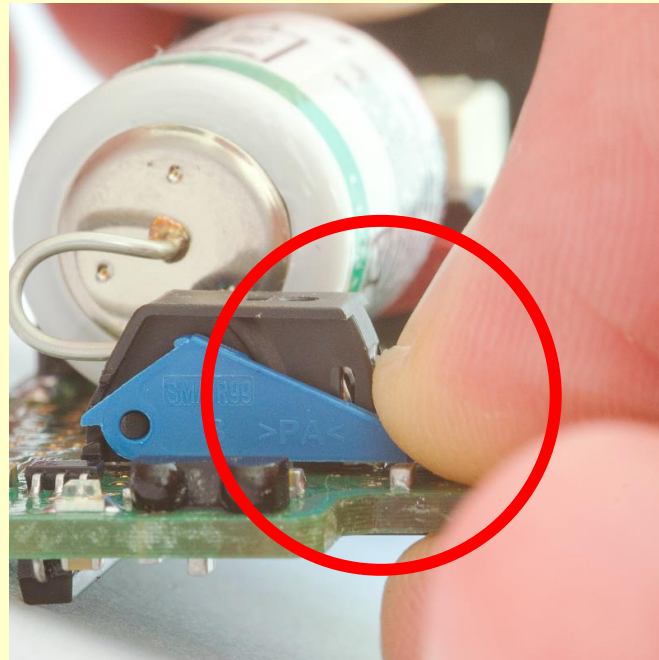
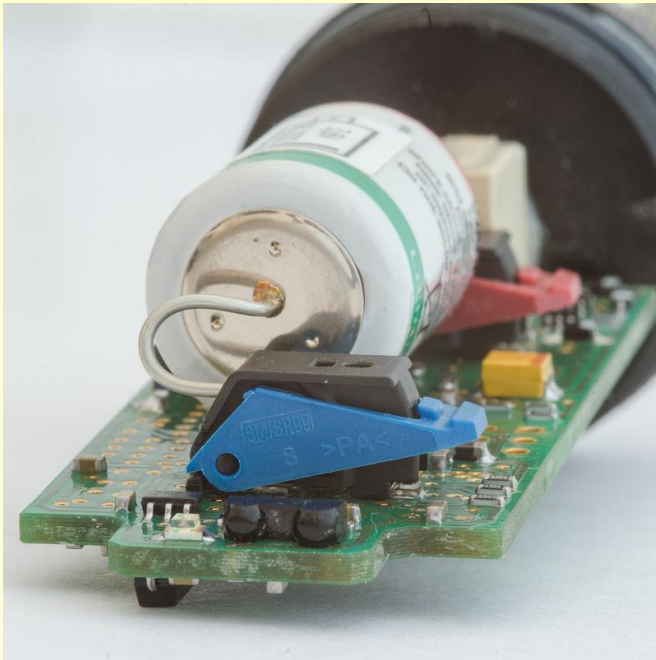




# Battery removal

- Push-in the negative (blue) spring clamp battery terminal and extract the battery wire.

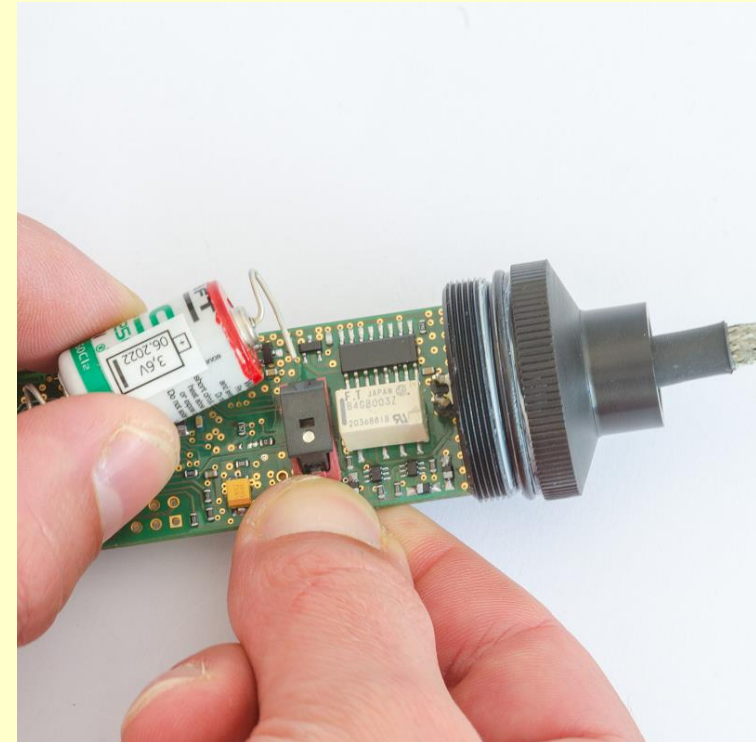
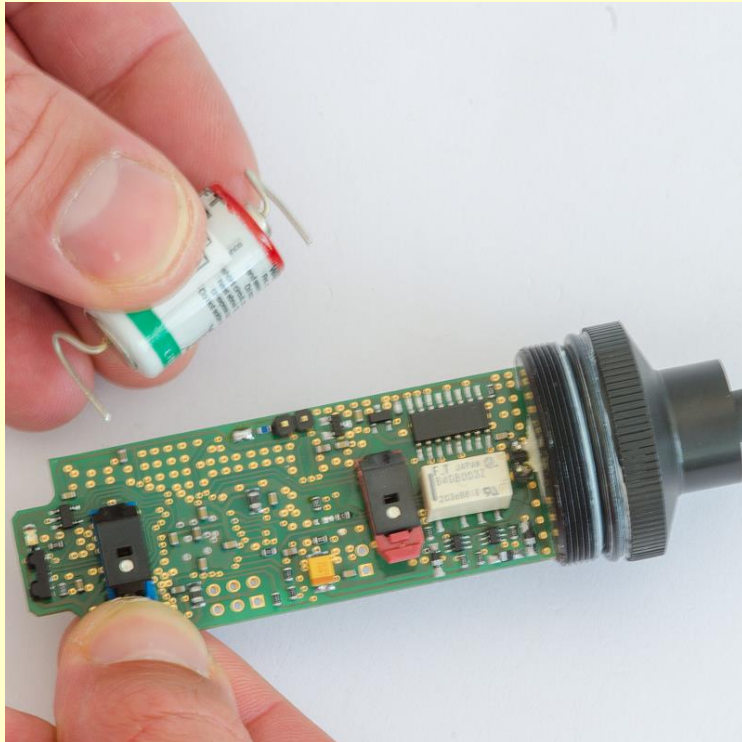
Note: Don't forget to recycle the battery.



# Battery inserting

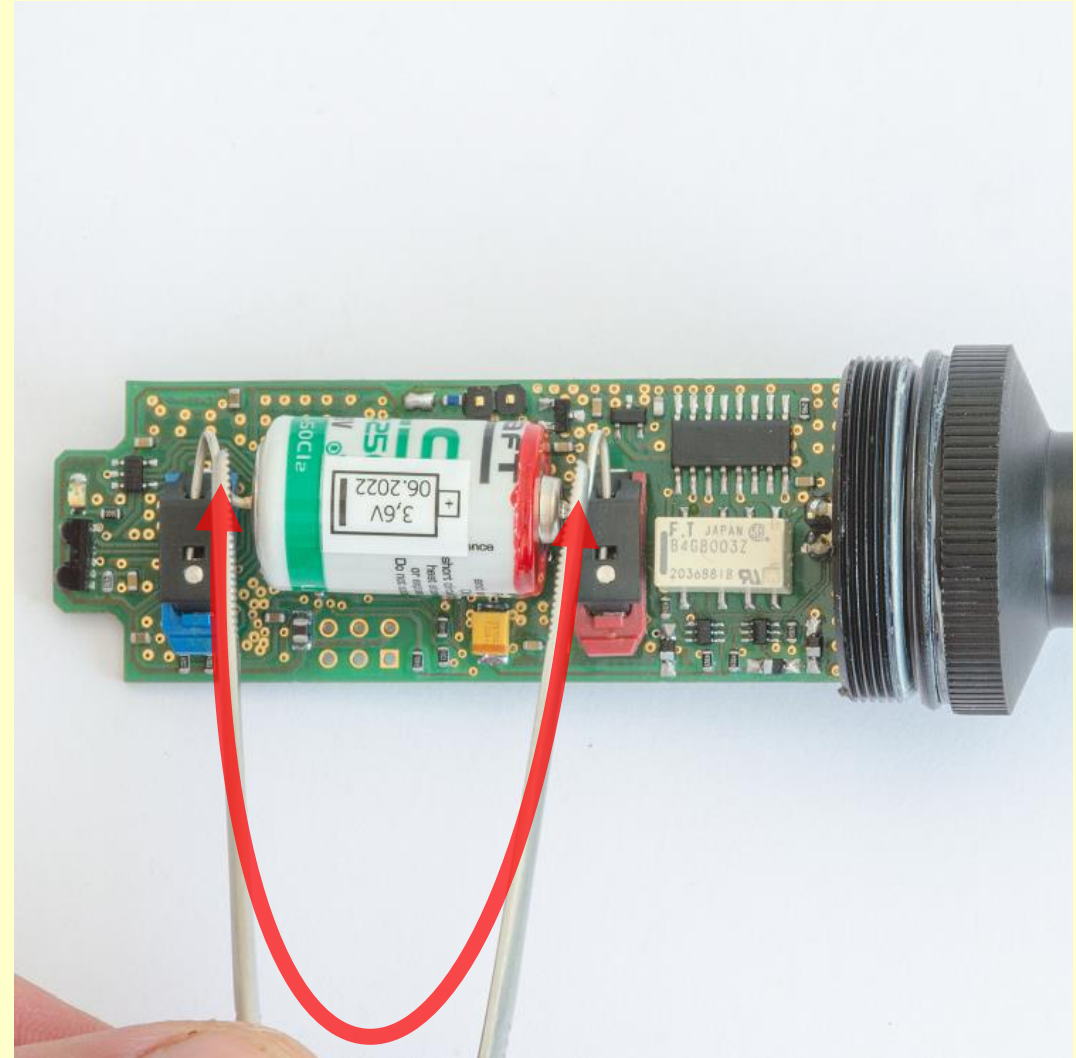
Insert the battery by reversing the removal procedure:

- Push-in the negative (blue) spring clamp battery terminal and insert the battery wire.
- Push-in the positive (red) spring clamp battery terminal and insert the battery wire.
- It is good idea to write down the time stamp of battery replacement.



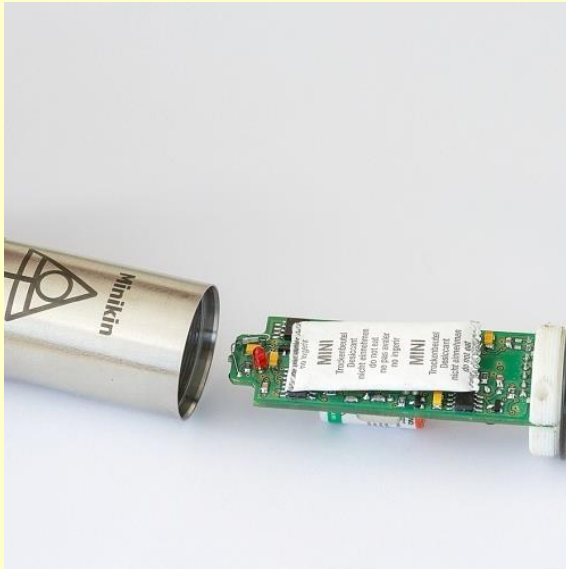
# Battery reset

- Short circuit the battery terminal wires of new battery for few seconds - see picture. This will reset the battery life counter. Tweezers is the ideal tool for this.
- Note that the battery counter can be reset even later from Mini32 software (Configuration>More>Batt. reset)



# Putting back together

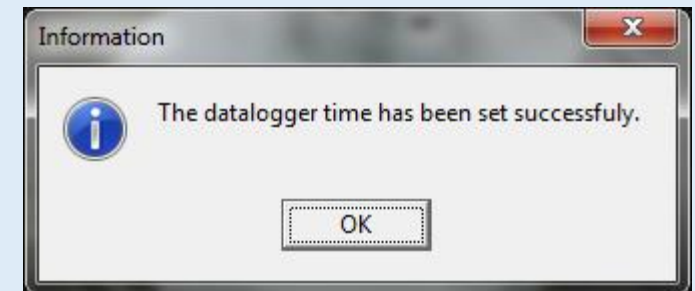
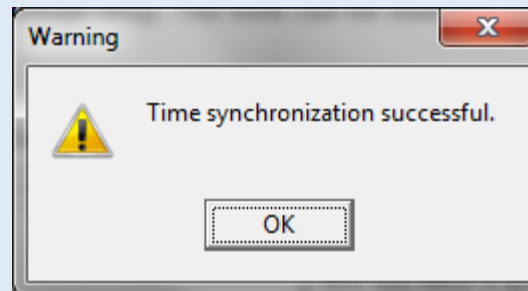
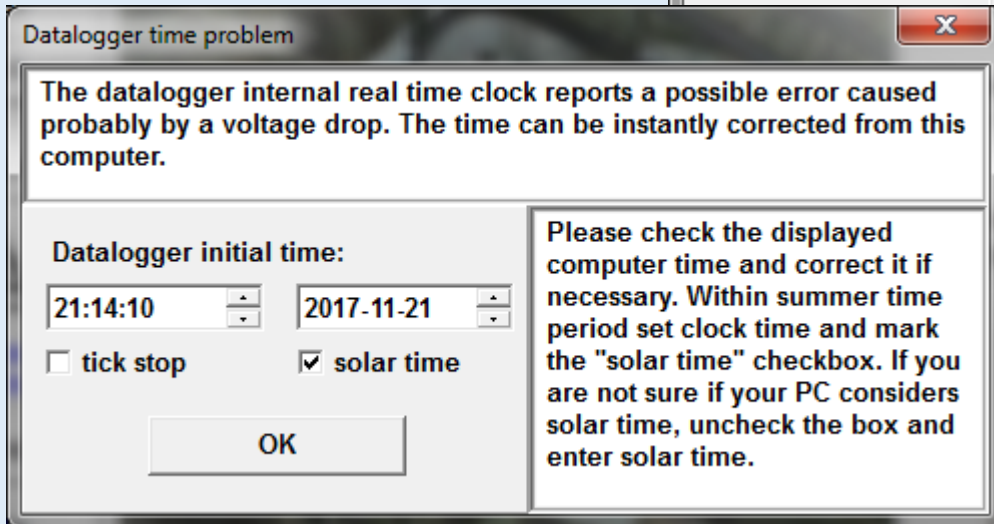
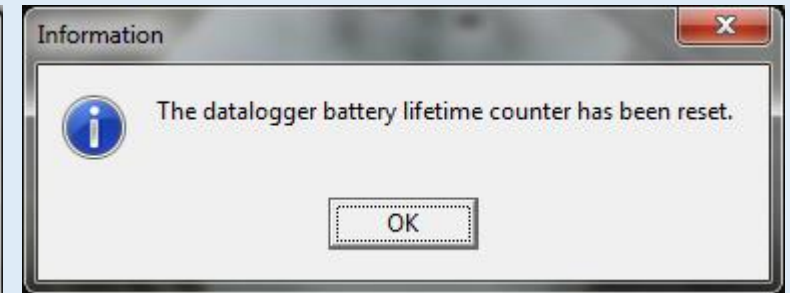
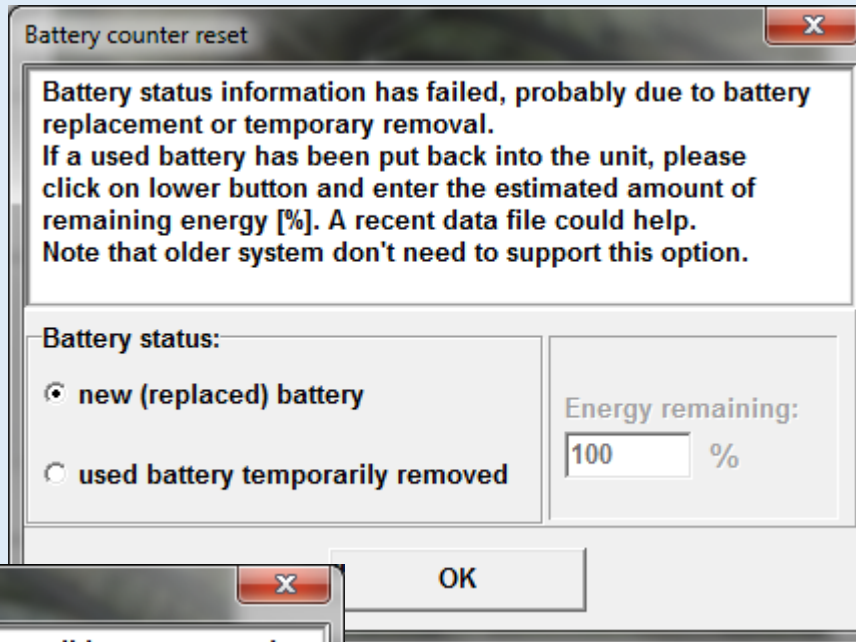
- Put new desiccant bag on the electronics.
- Insert the electronics carefully back into the stainless case.
- Screw it down gently, only by hand. Be careful not to screw “over the thread”.
- Loosen up the case for a few degrees after screwing down for later easier release.





# Sensor set up

Run Mini32 and go to Configuration. You will pass following windows and messages – just accept them:



# Battery counter

When the battery status does not show 100%, the short circuiting of battery has not been performed sufficiently. In such a case, the battery counter reset must be made manually – go to More>> Batt. Reset – 100%.

Minikin - SETTING UP Mini32 v. 10.2.17.0

More >>

Get

Send

Save setup

Read setup

Capacity info

Create RCF

Close

PC Time: 09.08.2022 10:54:13  
DL Time: 09.08.2022 9:54:14

ON/off

ON

Device type: SP1  
Device code 82  
Batt: 3,47 V

Periods:

measuring 1 h


storing 1 h

Battery remains: 100%  
(approx. 1425 days)  
Memory capacity: 2259 days  
Overwrite ENABLE

#	Type	ON/off	Range	Gauge	Description
1.	A.C. Resist	ON	60kOhm	SWP [-bar] GB Delm.	
2.	Temperature	ON	---	Temperature [oC]	

# Final check

Go to back to Mini32 main screen and push "On-line" button. Check the actual values and all status information. You might also download data in order to double check that there has nothing happened with memory structure during the battery replacement operation.

 Minikin - DATA HANDLING Mini32 v. 10.2.17.0

Actual values

Regular reading

☐ el. values

PrgmCalc

Close

PC Time: 09.08.2022 10:52:17  
DL Time: 09.08.2022 9:52:18

ON

Device type: SP1  
Device code: 82  
Batt: 3,49 V

Periods :  
measuring 1 h / warm-up 0 s  
storing 1 h

Battery remains: 78%  
(approx. 1425 days)  
Memory capacity: 2259 days  
Overwrite ENABLE

#	Type	Gauge	Electrical	Physical	Description
1.	A.C. Resist	SWP [-bar] GB Delm.	0	0,0852436	
2.	Temperature	Temperature [oC]	1098,83	25,3828	

**Good luck!**

*Prepared by Michal Bellan*