
FDB-22 ... 3D Printers: Filament consumption counter



TECHNICAL SPECIFICATION

- Power: 5 VDC (Adapter 110-220 VAC to 5 VDC)
- For filament 1.75 mm in diameter
- Measurement of consumption in meters
- Minimum displayed value: 0.001 m (1 mm)
- Wi-Fi connection
- Database online
- Configuration using your internet browser
- UPC: 697333921920
- EAN: 0697333921920

APPLICATION

- Upgrade 3D printers with Filament cloud database
- Automatic consumption for the selected filament written directly every minute in the cloud database and shown locally on the display
- Very easy to mount it directly on a 3D printer
- Database interface available online
- One year support and free database online
- Easy filament management in the cloud database (add, remove, modify) via interface



Configuration page:

Device: FDB-22 - Serial: <input type="text"/> - MAC Address: <input type="text"/>	
Connect to: <input type="text"/> ▼	Password: <input type="text"/> <input type="button" value="Submit"/>

Wi-Fi: i2LW_F0B4_5 **connected**
AP mode is off

Direction of subtraction: ☒ CCW ☐ CW

Coefficient of the pulley:

The pulley coefficient is calculated for the original part. In any case (example: upgraded pulley, etc.) you can change this value. Changing the coefficient is no longer available here (version 2). That value is changed automatically directly on the device. To make a correction for the pulley, press and hold the rotary button for about 3 seconds. Then the Calibrating mode will be activated and the coefficient will be written at the bottom of the display. Extrude a measured length of filament (e.g. 200 mm) and see if the display shows the correct length.



If not (for example it shows 205 mm), turn the rotary knob CCW or CW until you get the right value (in this case: 200mm).



When you got the right value, press the rotary button for a moment. A message to exit the calibrated mode will be written on the display.



Press and release the rotary button once more.

You will be asked to save the change.



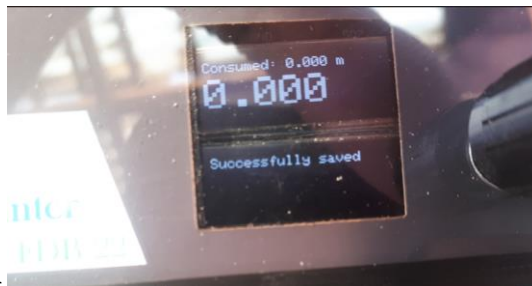
You have 2 choices: YES or DISCARD.

Turn the rotary knob CW or CCW to change your answer.



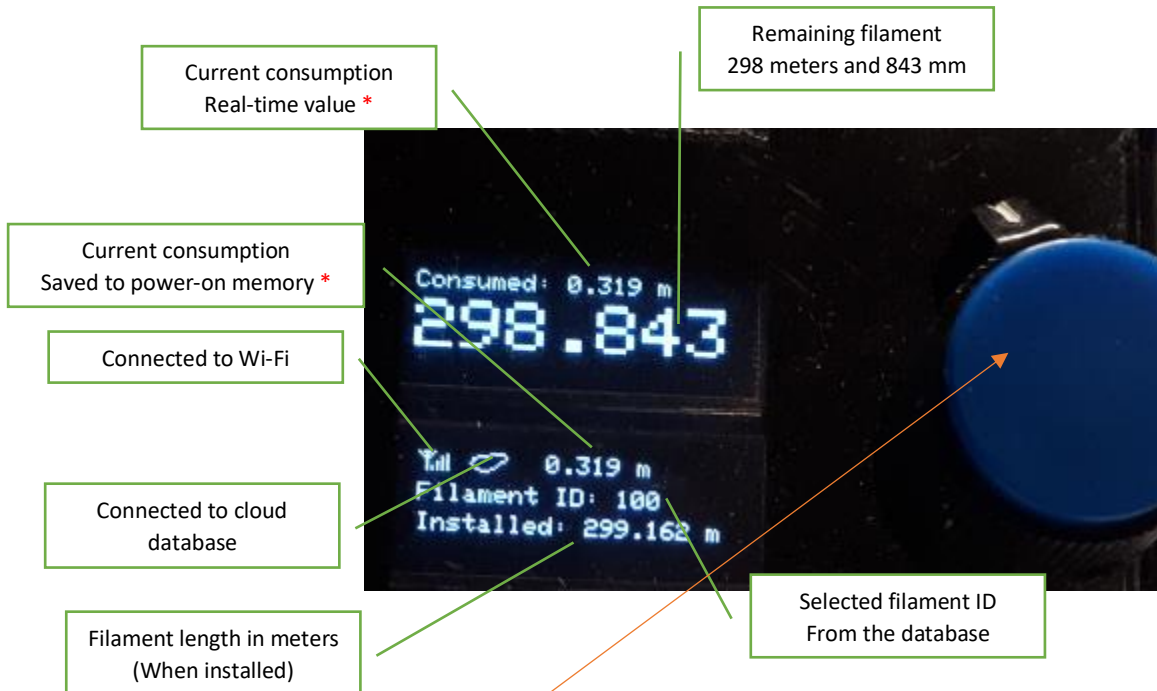
Finally, press and release the rotary button to confirm your answer.

FDB will write on the display that it understood your request and take the action you requested.



Please ignore the values in some pictures (for example above on the display in some pictures it shows zeros) - it is only illustrative and the real value should be 200 mm in this case.

What is shown on the display of counter?




To change the filament, press this button once and turn it clockwise or counterclockwise to find the desired ID.

Confirm by pressing the button again. (The same as for the 3D printer)

If you want to keep the same filament but reset the consumption, select the same ID and confirm by pressing the button a second time.

“*” Before changing the filament ID and if you are using the cloud database, make sure that the real-time consumption value is equal to the value stored in the power-on memory. The real-time value is also stored in the cloud database every minute if it is different from the value at power-up.

FILAMENT INVENTORY DATABASE



Filament inventory
ATQ International

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Filament ID	Filament Type	Color	Brand	Manufacturer Part	Seller	Price	Date Of Purchase	Nozzle	Full kg	Full m	Bed temperature min	Bed temperature max	Printing Temperature min	Printing Temperature max
1	PLA	White C	PolyLite Polymaker	PM70527	Amazon.ca	33.46	2022-02-05	0.40	1.00	335.00	25	60	190	210
2	TPU	White	Reprapper		Amazon.ca	40.23	2022-02-05	0.40	1.00	340.00	0	0	190	210
3	ABS	White	Ouverture		Amazon.ca	32.18	2022-01-29	0.40	1.00	400.00	80	100	245	260
4	TPE	Black	Filaments.ca		Filaments.ca	39.57	2021-11-24	0.40	0.50	243.00	80	90	220	240
5	PLA	Dark Green	Filaments.ca		Filaments.ca	17.95	2021-07-10	0.40	1.00	335.00	0	0	195	210
6	PETG	White	Duramic		Amazon.ca	24.14	2021-09-13	0.40	1.00	338.00	0	0	230	250
7	PLA	Dark Blue	Filaments.ca		Filaments.ca	17.95	2021-07-10	0.40	1.00	335.00	0	0	195	210
8	PLA	Grey	Filaments.ca		Filaments.ca	17.95	2021-07-10	0.40	1.00	335.00	0	0	195	210

Manufacturer data

Filament ID	1	Nozzle	0.40
Filament Type	PLA	Full coil (in kg)	1.00
Color	White C	Full coil (in meters) ***	335.00
Brand	PolyLite Polymaker	Bed temperature min °C	25
Manufacturer Part	PM70527	Bed temperature max °C	60
Seller	Amazon.ca	Printing Temperature min °C	190
Price	33.46	Printing Temperature max °C	230
Date Of Purchase	2022-02-05	Fan (On/Off)	ON
Gauge	1.75	Printing speed min (mm/s)	40
		Printing speed max (mm/s)	60

Add new
Submit

User data

Printer Model	Endr 3
Print Temperature °C	195
Bed Temperature °C	55
Print Speed (mm/s)	60
Quality rating	★★★★★
Comment	good
Filament Current length (m)	279.827

Current consumption
0.417
Current data from printer

Consumed

The online filament database allows you to save from 50 filaments (free account) to an unlimited number of filaments (corporate account). You can share some data with other users, such as filament type, brand, seller, price, quality rating, etc. This can help you find and choose a good filament for future purchases.

You can change any value at any time. When the consumption meter is connected, the "filament current length" field is automatically decreased/written every minute if the printer is running.

The database is also available without equipment.

You can try it for free for a certain period of time.

The free database is available for 50 entries (filaments) but, when the filament is consumed - by clicking on the "Consumed" button you can close it and free an entry.

Data hosting costs us. Likewise, the number of processes has a price for us.

So, we need to limit free accounts without buying a device for a certain amount of time.

You can always remove this time limit if you make a donation.

LOGIN

LOGIN to Filament database

Email

Password

You do not have an account?

Click on: [Create account](#)

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To connect to the Filament database, go to: <https://fdb-22.opcnet.com/>

Enter your email address and the password you chose when you opened your account.

Your credentials will be stored locally on your device used to log in. You will not be prompted to enter your password until you click "Logout" or clear your browser's cache.

Please contact the helpdesk if you have forgotten your password - we will reset it.

If you are logging in for the first time and do not have an account, click on the "Create an account" link.

Filament database - New Account	
Database only	<input type="checkbox"/> I want to use the database only without equipment (counters) (you can add it later)
Counter serial#	<input type="text" value="FDB-22 Serial number"/>
Your Name or Company name	<input type="text" value="Full name"/>
Location	<input type="text" value="Printer name/number"/>
Country	<input type="text" value="Country"/>
Your Email	<input type="text" value="Email"/>
Choose Password	<input type="text" value="Password"/>
Retype Password	<input type="text" value="Retype Password"/>
<input type="button" value="Create account"/>	

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In general, you will need the serial number of the device you purchased.

The serial number is located on the back of the device.



If you don't have the serial number of the device or if you want to use the database only without buying a counter, check the "I want to use the database only" box. This will allow you to create an account without a serial number.
Make sure you have entered your email address correctly in order to use the database.