FDB-22 … 3D 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
- Cloud 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 (optimized for Ender 3)
- Cloud 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:

The pulley coefficient is calculated for the original part. In any case (example: upgraded pulley, etc.) you can change this value here.
A trick to calculate the new value:
Mark the beginning and end of one length on the filament (for example 1000 mm (1m)) and install the filament on the pulley.
Reset the counter. Pull one side with your hand until you reach the marked end. Consumption should be: 1,000
If 1,050 is shown for example, you have 50mm more than is realistic. You can use the following formula to calculate the new coefficient:
100/1000*1050 = 105 (%)
0.000653259/100*105 = 0.0006852195 (new coefficient)
The coefficient has a maximum of 9 decimals, so you need to around the value to 9 decimals: 0.000685219 or 0.000685220

What is shown on the display of counter?

Remaining filament
298 meters and 843 mm

Current consumption
Real-time value *

Current consumption
Saved to power-on memory *

Connected to Wi-Fi

Connected to cloud
database

Filament length in meters
(When installed)

Consumed: 0.319 m
298.843

0.319 m
Filament ID: 100
Installed: 299.162 m

Selected filament ID
From the database
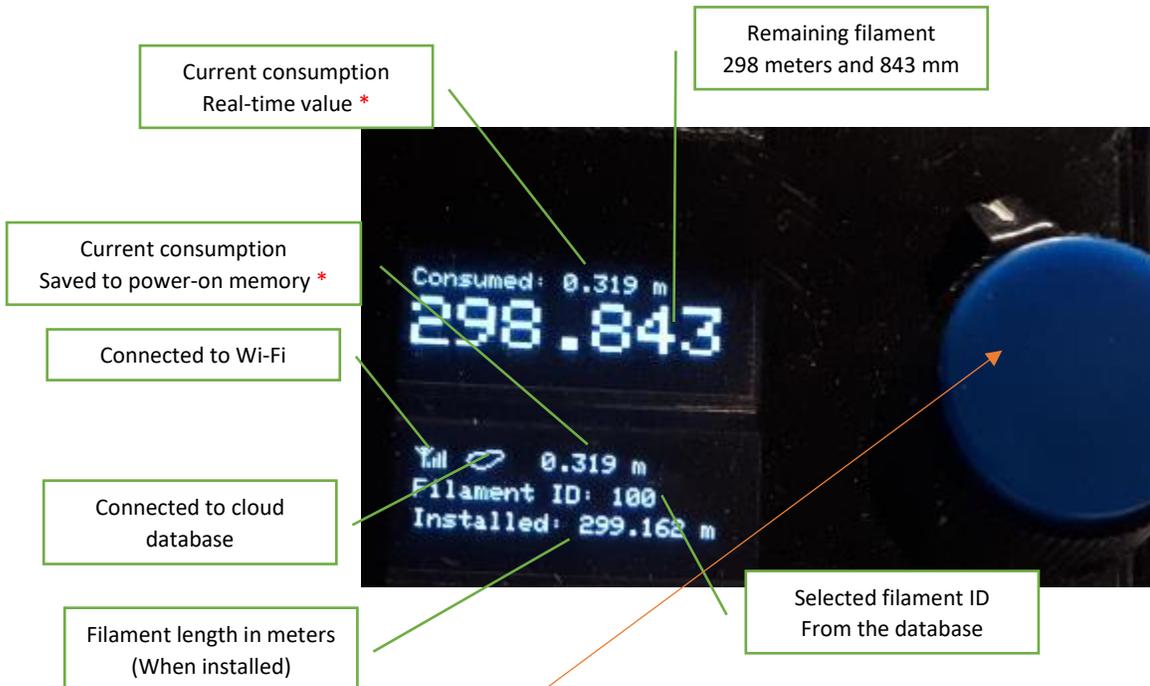
To change the filament, press this button once and turn it clockwise or counterclockwise to find the desired ID.
Confirm by pressing the button again. (The same as for the 3D printer)
If you want to keep the same filament but reset the consumption, select the same ID and confirm by pressing the button 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

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

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.

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.