

Test guide: reading filament usage from a Bambu Lab printer (MQTT)

Data collection for a future version of 3MF Katalog Manager · As of 25 Sep 2026 · Takes about 20 minutes · Linux, Windows and macOS

Hi, and thanks for helping out!

Bambu printers speak MQTT on your home network instead of a web page. A browser isn't enough for that, you'll need the free app **MQTT Explorer**. We want to find out what data the printer still exposes in LAN mode today, especially about the AMS trays and the end of a print.

Nothing is changed on your printer. You're only reading what the printer already sends onto your home network.

1 Does my printer qualify?

Any Bambu printer on your home network can take part. The firmware version matters, since Bambu restricted access for third-party programs in 2025.

● ALL CURRENT MODELS

X1C / X1E · P1S / P1P · A1 / A1 mini · H2D · with or without AMS.

● LAN-ONLY OR DEVELOPER MODE

If you have one of these switched on: please say so, that's exactly the interesting question.

● BAMBU CLOUD ONLY

Please take part anyway; the connection still runs over your home network.

● NO ACCOUNT DETAILS!

We never ask for your Bambu account. Only the LAN access code from the display is needed for MQTT Explorer, and it stays with you.

2 Security first

Important: On the printer, under *Settings* → *Network*, you'll find the **IP address** and the **LAN access code**. **Never copy the access code or the serial number into the form, an email or the Discord post.** We also never ask for your Bambu account or password. The form auto-redacts access-code and serial-number patterns too – but it's still safest not to type them in at all.

3 Preparation

- ☐ Download **MQTT Explorer** – free for Windows, macOS and Linux: mqtt-explorer.com .
- ☐ The printer is switched on and on the same network as your computer.
- ☐ On the display under *Settings* → *Network*: have the IP address, LAN access code and serial number ready.

4 MQTT Explorer step by step

There's no original screenshot, so here's a schematic view of the important connection fields:

New connection (schematic)	
Host	<printer IP>
Port	8883
Protocol	mqtt://
Encryption (TLS)	on
Validate certificate	off
Username	bb1p
Password	<LAN access code>

Schematic example of the connection fields – not the real app, no Bambu or MQTT Explorer logo.

NO.	ACTION	WHEN	WHAT YOU GET
1	Create a new connection as shown above and connect.	once	connection to the printer
2	Under “Topics” open <code>device/<serial>/report</code> .	once	the printer's reports appear here
3	Publish to <code>device/<serial>/request :</code> <code>{ "pushing":</code> <code>{ "sequence_id": "0", "command": "pushall" }}</code>	idle	the full report incl. AMS trays
4	Send <code>pushall</code> again	during a print	file, progress, active tray
5	Send <code>pushall</code> again	right after the print	whether the end of the print and remaining amounts are visible

Connection not working? Please tell us your firmware version and whether LAN-only or developer mode is on. “Connection refused” is an important result too.

5 What I need back

Please copy the complete JSON report under `device/<serial>/report` at these three points in time:

ANSWER	WHEN	NEEDED?
report after pushall	idle	yes
report after pushall	during a print	yes
report after pushall	right after the print	yes

Plus three short questions:

- ☐ Which mode is switched on on the printer? (normal / LAN-only / LAN-only + developer mode / don't know)
- ☐ Do you have an AMS? (AMS / AMS lite / AMS HT / no AMS)
- ☐ Did the connection with MQTT Explorer work? (yes / no, refused / no, no response)
- ☐ printer model and firmware version (e.g. "Bambu Lab P1S, firmware 01.08.02.00")

6 How and where to send it

Easiest via the form on the test page: <https://3mfkatalog.de/en/printer-test.html#bambu> . It also auto-redacts access-code and serial-number patterns before sending.

Or **on the 3MF Discord**, channel **#feature-wünsche-requests**, post **"Bambu Lab – test results"**. Not on the server yet? Join at <https://discord.gg/abfVNfFqu3> .

Your data: The report contains a file name and serial number. If you don't want to share them, replace the file name with "File 1" and the serial number with "SN1" before sending. The LAN access code and your Bambu account don't belong in any field – they're never sent and never stored.

7 If something doesn't work

WHAT HAPPENS	WHAT YOU CAN DO
Connection refused	Check LAN-only / developer mode, check the TLS setting (on), re-read the access code from the display.
Certificate error	"Validate certificate" must be off – Bambu printers use a self-signed certificate.
No response to pushall	Check the serial number in the topic path (upper/lower case), the firmware may be blocking access – that's exactly what we want to know.
Topic stays empty	<code>report</code> only fills with data after the first <code>pushall</code> .

Sources: community documentation on Bambu's LAN mode (MQTT) and public projects covering the Bambu interface. Bambu restricted access for third-party programs in 2025 – your answers help us find out what still works for you. Details may differ by firmware version.

Thanks a lot for helping!
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