

Bitcoin mining difficulty rises +5.54%: PPS per PH/s resets 5.25% lower

Epoch Review: blocks 971,712–973,727

- Bitcoin mining difficulty rose **+5.54%** at block 973,728 (29 Oct 2026, 19:14 UTC), from 140.58 T to 148.36 T: the second increase in a row after +5.92% on 16 Oct 2026 and the highest difficulty since 27 Nov 2025 (149.30 T).
- October 2026 is the year's biggest month for difficulty:** the month's three retargets (−0.03% on 3 Oct, +5.92% on 16 Oct, +5.54% on 29 Oct) add up to +11.75%, so PPS per PH/s now pays 10.52% less than on 1 October, the largest monthly fall of 2026 from difficulty alone. Uncertainty is high as this review goes out: late on 29 Oct Binance reported a hack of about \$6.3 billion, suspended withdrawals and said it will cover all losses from company funds. BTC futures liquidations followed: \$385 million in the 24 hours from 29 Oct, 20:00 UTC, 86% of them long positions, the largest 24 hours of the past 30 days.
- The closed epoch ran **one block every 9 min 29 s**: 2,016 blocks in 13.27 days, 151.9 blocks a day against the 144 target.
- For 1 PH/s, **PPS falls 5.25%**, from 0.00044719 to 0.00042371 BTC per day (2,348 sats less for 1 PH/s), and stays at this level for 2,016 blocks, until the next reset at block 975,744 (around 12 Nov 2026 if blocks average 10 minutes).
- Fees: 31.52 BTC over the epoch, **0.50% on top of the subsidy**, down from 35.78 BTC (0.57%) in the prior epoch.
- If transaction fees stay at a similar level, **FPPS would pay about 0.00042583 BTC** per PH/s per day, with a variance of −50 / +86 sats (0.00042533–0.00042669 BTC).

What changed at block 973,728

Bitcoin mining difficulty resets every 2,016 blocks, so that blocks arrive on average every 10 minutes. The epoch that ended at block 973,727 took 13.27 days instead of the 14-day target, so the protocol raised difficulty by the ratio of target time to actual time: +5.54%. BMM's node records the new difficulty as 148.36 T, up from 140.58 T. The previous adjustment, on 16 Oct 2026, was +5.92%.

What it means for 1 PH/s

PPS (Pay-Per-Share) pays only the expected share of the block subsidy (3.125 BTC per block), so between halvings it depends on difficulty and nothing else. A higher difficulty means each PH/s finds proportionally fewer blocks: PPS per PH/s falls by 5.25%, from 0.00044719 to 0.00042371 BTC a day (44,719 to 42,371 sats). That level holds for the whole new epoch.

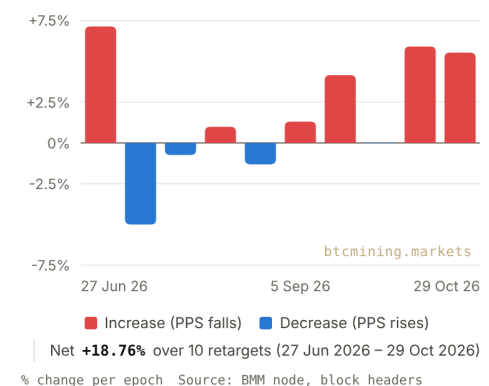
FPPS (Full Pay-Per-Share) adds the network's transaction fees on top of the subsidy. In the closed epoch fees averaged 0.50% on top of the subsidy (ranging 0.38%–0.70% over its full UTC days). At that level FPPS would pay about 0.00042583 BTC per PH/s per day, with an implied range of 0.00042533–0.00042669 BTC. These are not a forecast, and all figures are before pool fees.

1 PH/s per day, BTC (before pool fees)

	from 16 Oct	from 29 Oct	Change
Hashrate**, EH/s	1,006.3	1,062.0	+5.54%
Difficulty	140.58 T	148.36 T	+5.54%
PPS	0.00044719	0.00042371	−5.25%
FPPS*	0.00044942	0.00042583	−5.25%
FPPS* range		42,533–42,669 sats	

*At the closed epoch's fee level: fees 0.50% on top of the subsidy; range from its lowest- and highest-fee full days (0.38%–0.70%). **Hashrate each difficulty is set for at 10-minute blocks; the closed epoch actually averaged about 1,062 EH/s. Source: BMM node.

Difficulty adjustments, last 10 epochs

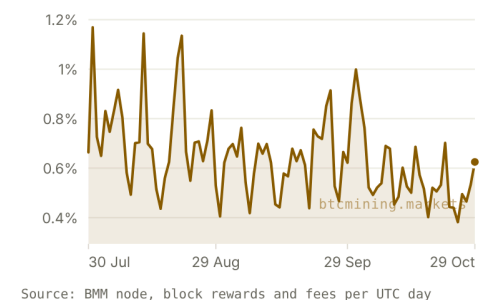


Source: BMM node ·

btcmMining.markets/dashboard/bitcoin-network/

FPPS rate above PPS, daily, last 3 months

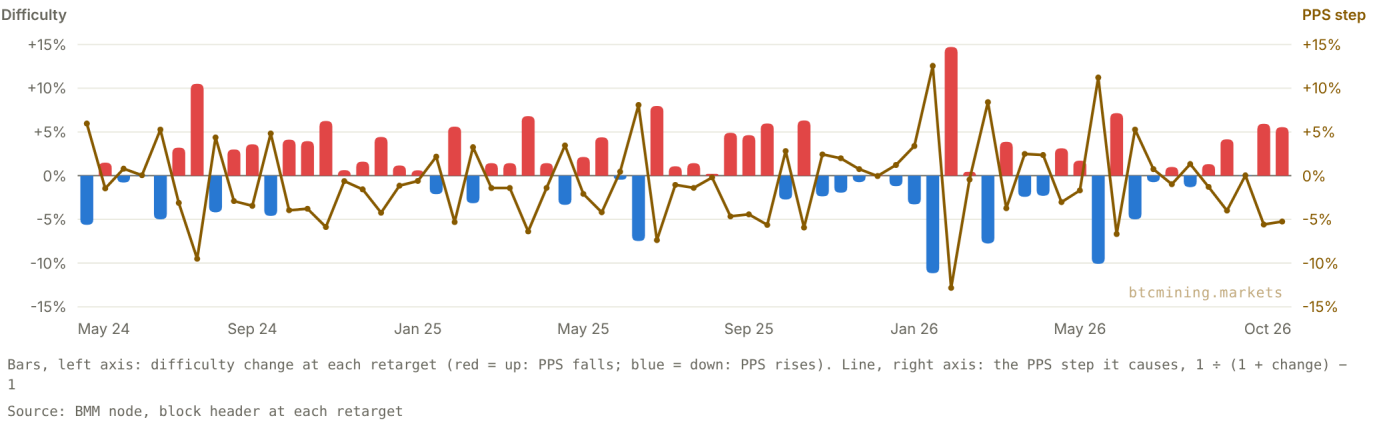
Transaction fees as % of the block subsidy.



Source: BMM node ·

btcmMining.markets/dashboard/miner-economics/

Difficulty change at each retarget this cycle, and the PPS step it caused



Source: BMM node · btcmining.markets/dashboard/difficulty-epoch/

The closed epoch in numbers

Blocks 971,712 to 973,727 ran from 16 Oct 2026, 12:37 UTC to 29 Oct 2026, 18:59 UTC. Over its 12 full UTC days, block counts ranged from 128 (22 Oct) to 174 (23 Oct); the first and last days of the epoch were partial and are left out. Fees averaged 0.50% on top of the subsidy, lowest 0.38% (25 Oct) and highest 0.70% (22 Oct). The 151.9 blocks a day correspond to an average network hashrate of about 1,062 EH/s (BMM calculation from block times and difficulty).

Compared with the prior epoch (ended 16 Oct)

Blocks 969,696–971,711 took 13.22 days (152.5 blocks a day) and paid 35.78 BTC in fees (0.57% on top of the subsidy). The epoch closed on 29 Oct produced 0.4% fewer blocks per day and 11.9% less in fees for the same 2,016-block period.

The closed epoch, day by day

UTC DAY	BLOCKS	VS 144	FEES, BTC	% OF SUBSIDY
16 Oct*	71	-73	1.45	0.65%
17 Oct	137	-7	2.21	0.52%
18 Oct	158	+14	1.99	0.40%
19 Oct	153	+9	2.49	0.52%
20 Oct	165	+21	2.61	0.51%
21 Oct	151	+7	2.51	0.53%
22 Oct	128	-16	2.81	0.70%
23 Oct	174	+30	2.41	0.44%
24 Oct	146	+2	2.01	0.44%
25 Oct	156	+12	1.86	0.38%
26 Oct	162	+18	2.50	0.49%
27 Oct	158	+14	2.30	0.47%
28 Oct	144	+0	2.39	0.53%
29 Oct*	113	-31	1.99	0.56%
Epoch	2,016	151.9/day	31.52	0.50%

btcmining.markets

*Partial days: the epoch started 16 Oct 2026, 12:37 UTC and ended 29 Oct 2026, 18:59 UTC. % of subsidy = how much FPPS pays above PPS. Epoch: 13.27 days. Source: BMM node, every block.

Where to follow it

Difficulty epoch	btcmining.markets/dashboard/difficulty-epoch/
Miner economics	btcmining.markets/dashboard/miner-economics/
Bitcoin network	btcmining.markets/dashboard/bitcoin-network/

Contacts

E-mail	connect@btcmining.markets
X	@BTCMiningMarket
LinkedIn	linkedin.com/company/btcminingmarkets
Website	btcmining.markets

Data and method

Data: BMM's own Bitcoin node (Bitcoin Core), every block of the epoch; times in UTC. $PPS = 3.125 \text{ BTC} \times 86,400 \times 10^{15} \div (\text{difficulty} \times 2^{32})$, per PH/s per day. $FPPS = PPS \times (1 + \text{fees} + \text{subsidy})$. Blocks per day = $(\text{blocks} - 1) \div \text{time between the first and last block}$. Fees are shown as % of the block subsidy, which is also how much FPPS pays above PPS (as a share of total block revenue the closed epoch was 0.50%). Hashrate in the key-figures table is the hashrate each difficulty is set for at 10-minute blocks ($\text{difficulty} \times 2^{32} \div 600 \text{ s}$). Data as of 30 Oct 2026, 21:59 UTC. BMM commentary (summary bullet 2) sources: Binance hack, Yahoo Finance and BBC News, 30 Oct 2026; futures liquidations, Coinalyze (BTC perpetuals on Binance, Bybit and OKX), collected by BMM. PPLNS is not included: its payouts depend on each pool's luck and share window, so no single figure applies. All figures are before pool fees. Mining figures are in BTC; USD amounts appear only as market context in summary bullet 2. FPPS figures are illustrations at the closed epoch's fee level, not forecasts. This note is for information only and is not investment advice.