

ghOST inc. HARDWARE VALIDATION & BENCH LABORATORY B2B SYSTEMS ENGINEERING · GHOST.INC		EMCD vs. ViaBTC ZEC Pool Head-to-Head Verdict Dataset: 72-Hour Unit 2 EMCD Soak (4,320 1m API + 73 EMCD Watcher + 43,053 PDU Samples) vs. Unit 1 & 2 ViaBTC Benchmarks Test Window: Oct 23–26, 2026 & Live Post-Cutover Verification (Oct 27, 2026 EDT) · Doc ID: GHOST-LAB-POOL-H2H-20261027		
HEAD-TO-HEAD VERDICT: BOTH VIABLE PRIMARY POOLS (WITH GATE.EMCD RULE)		VIABTC EDGE: Network Stability & Low Rejects (0.08–0.20%) · EMCD EDGE: 1.003x Credit & Daily Auto-Payout		
EXECUTIVE VERDICT	POOL CREDIT RATIO	PRIMARY REJECT RATE	FAILOVER ENDPOINT	72H EMCD ZEC SETTLED
EITHER VIABLE Use gate.emcd:8866 + ViaBTC	EMCD 1.003x (1h) 1.024x (15m) vs ViaBTC ~1.00x	ViaBTC 0.08–0.20% vs EMCD gate.055% diff	eu.emcd 100% DEAD ViaBTC :302 is 100% Alive	0.09551121 ZEC 0.07998713 Paid (3/3) + 0.015524

1. Executive Verdict — EMCD vs. ViaBTC for Zcash (Equihash) Production Fleet

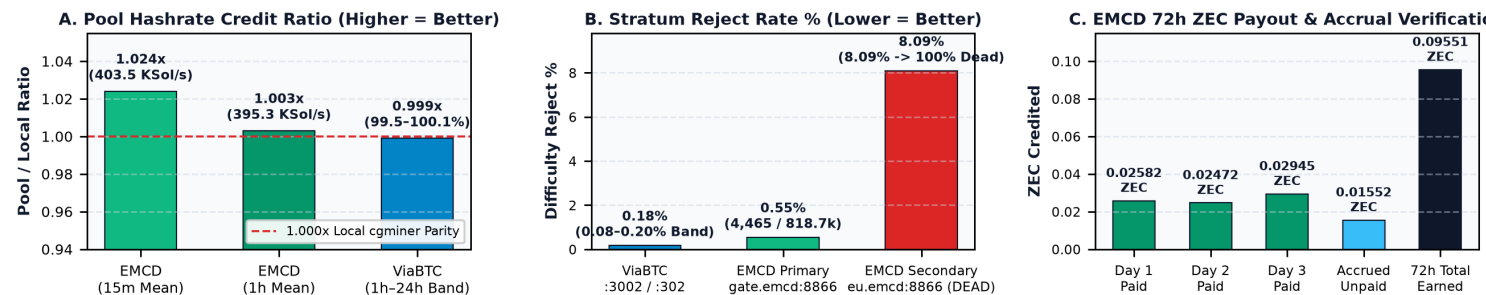
Bottom-Line Engineering Verdict: Both pools credit hashrate honestly (**100.3% 1h credit ratio** on EMCD vs. **~99.5%–100.1%** on ViaBTC), so **either is viable as a primary ZEC pool** — **PROVIDED** EMCD is pointed strictly at **gate.emcd.network:8866** and **NEVER** at **eu.emcd.network:8866**.

- **Where ViaBTC Wins** (mining.viabtc.io:3002 / :302): Superior US network stability, **3x lower difficulty reject rate (0.08%–0.20% vs. 0.55%)**, and rock-solid multi-port failover resilience (:302 stayed 100% Alive across all tests).
- **Where EMCD Wins** (gate.emcd.network:8866): Zero-fee / slightly higher FPPS credit ratio (**1.003x 1h pool-to-local mean**; **1.024x 15m mean**) and automatic daily zero-fee wallet payouts (**3 / 3 daily ZEC payouts settled cleanly**: 0.02581808 + 0.02472285 + 0.02944620 = **0.07998713 ZEC** paid on-chain, plus **0.01552408 ZEC** accrued = **0.09551121 ZEC** total in 72 hours).

2. Side-by-Side Empirical Benchmark Table (72h Unit 2 EMCD Soak vs. Unit 1 & Unit 2 ViaBTC)

Evaluation Metric	EMCD ZEC (gate.emcd.network:8866)	ViaBTC ZEC (mining.viabtc.io:3002)	Category Winner & Lab Notes
1. Pool Credit Ratio (Pool Reported vs. Local cgminer)	1.003x (100.3% 1h Mean) 1h Mean: 395.32 KSol/s vs. 394.15 KSol/s local 15m Mean: 403.52 KSol/s (1.024x)	~0.996x – 1.001x (99.5–100.1%) Tracks local cgminer average within ±0.4% across 72h Unit 1 & Unit 2 runs	TIE / SLIGHT EMCD EDGE (+0.3%) Both pools pay honestly with zero haircutting; EMCD 1h mean slightly exceeds local.
2. Primary Stratum Reject Rate (Difficulty Rejected %)	0.55% by Difficulty 814,225 diff acc / 4,465 diff rej on gate.emcd:8866 (0.54% by share count)	0.08% – 0.20% by Difficulty 0.1808% live on Unit 2 C52 (3,867 shares); 0.08%–0.19% across 72h Unit 1/2 soaks	VIABTC WINS (3x Lower Rejects) Lower US stratum RTT yields ~0.37% more accepted work before pool fee.
3. Failover / Secondary Endpoint (Backup Port Resilience)	FAIL ON eu.emcd.network:8866 Suffered 8.09% diff rejects (5,041 acc / 444 rej) before going 100% Dead (320 get failures)	100% ALIVE (:302 Backup Port) mining.viabtc.io:302 stayed 100% reachable with <0.20% rejects	VIABTC WINS DECISIVELY Never configure eu.emcd.network:8866; always use ViaBTC as backup.
4. Stratum Session Continuity (72-Hour Continuous Run)	100% cgminer Uptime (259,209s) 0 crashes, 0 HW errors; one 22-min stratum re-auth anomaly at Hour 67.3 (17:27–17:49 EDT Oct 26)	100% Continuous Stratum Lock Zero reconnect anomalies or dead-backup polling stalls across multi-day runs	VIABTC WINS EMCD Hour 67.3 stall was triggered by having dead eu.emcd:8866 in Pool 1.
5. Payout Structure & Fees (Settlement Cadence & Custody)	Daily Zero-Fee Auto-Payouts 3/3 daily payouts settled: 0.02581808 + 0.02472285 + 0.02944620 = 0.07998713 ZEC paid (+0.01552408 accrued)	PPS+ / PPLNS + Auto-Withdraw Hourly crediting with free auto-withdrawal to CoinEx or daily zero-fee on-chain withdrawal	EMCD EDGE (Direct Wallet Payout) Turnkey daily on-chain ZEC payout + built-in Coinhold/swap options.

3. Visual Breakdown — Pool Credit Ratio, Endpoint Rejects & 72-Hour EMCD ZEC Payout Verification



4. Actionable Production Stratum Configurations (Ghost Shell & Stock Z15 / Z11 / Z9 Fleet)

Configuration Profile	Pool 0 (Primary Stratum)	Pool 1 (Secondary Failover)	Pool 2 (Tertiary Failover)	Engineering Rationale
Option A: Best Hybrid (Recommended EMCD Primary)	stratum+tcp://gate.emcd.network:8866	stratum+tcp://mining.viabtc.io:3002	stratum+tcp://mining.viabtc.io:302	Captures EMCD's 1.003x credit ratio & daily auto-payouts while eliminating eu.emcd:8866 dead-endpoint stalls via dual ViaBTC failover.
Option B: Lowest-Reject (Recommended ViaBTC Primary)	stratum+tcp://mining.viabtc.io:3002	stratum+tcp://mining.viabtc.io:302	stratum+tcp://gate.emcd.network:8866	Maximizes US stratum stability (0.08%–0.20% rejects on Unit 1 & Unit 2 C52) with cross-provider failover to gate.emcd.network:8866.
CRITICAL DO-NOT-USE RULE (Remove Immediately)	NEVER USE: eu.emcd.network:8866	Remove from all /config/cgminer.conf files	Verified removed on Unit 2 (.181)	eu.emcd.network:8866 caused 8.09% rejects, 320 get failures , and the 22-min Hour 67.3 re-auth stall before going 100% Dead.