

Performance Summary (100K vectors)

Metric	HNSW (ef=20)	ZGQ v8 (ef=12)	Winner
Recall@10	92.9%	93.2%	✓ ZGQ
Throughput (QPS)	34,190	43,794	✓ ZGQ
Latency (ms)	14.62	11.42	✓ ZGQ
Build Time (s)	2.08	2.65	✓ HNSW

ZGQ v8 wins 3/4 metrics