

EDGE-QI vs. State-of-the-Art Comparison

Framework	Energy Savings	Bandwidth Reduction	Response Time (Critical)	Multi-Edge Collaboration	Queue Specialization
EDGE-QI	28.4%	74.5%	<250ms	Yes (BFT)	Optimized
Mobile Edge Computing	15-20%	30-40%	400-600ms	Limited	General
Standard Task Scheduler	10-15%	20-30%	500-800ms	No	General
Cloud-Edge Hybrid	5-10%	40-50%	600-1000ms	Partial	General
Fog Computing Framework	12-18%	35-45%	300-500ms	Limited	General

Key Performance Indicators

30+
Real-time FPS

93.0%
Accuracy (F1)

<200ms
Consensus Latency

Up to 6
Edge Devices