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(57) Abstract :
The invention discloses a quantum computing-based system for logistics route optimization comprising a logistics data input module (101), preprocessing unit (102), quantum optimization engine (103), hybrid integration layer (104), decision-support module (105), and optimized route output interface (106). By leveraging quantum computational principles alongside classical heuristics, the system enables real-time, adaptive, and environmentally sustainable logistics optimization. It reduces computational time, ensures dynamic adaptability, and provides user-friendly visualization tools, making it highly effective for large-scale, complex logistics networks.

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