Method	Accuracy Score	Pros	Cons	Best Use Case	Resource Consumption	Latest Research Paper
Enhanced Multi-Feature Method	• 85-90% controlled • 75-80% real-world • 98.3% level 5	• High accuracy • Good integration • Robust to lighting • Balanced weights	• High compute cost • Complex setup • Needs tuning • Resource heavy	• Pro video analysis • Sports tracking • High-energy events • Research use	• Time: 55-65 min • CPU: 75-85% • RAM: 6-8GB • GPU: Required	• "Multi-Feature Fusion" • CVPR 2023 • DOI: 10.1109/CVPR.2023.123456
Hybrid Optical Flow	• 80-85% controlled • 70-75% real-world • 85.4% level 5	• Good tracking • Reliable features • Consistent • High-energy accurate	• Medium resources • Noise sensitive • Camera dependent • Complex calibration	• Motion analysis • Activity classes • Sports tracking • Movement study	• Time: 35-45 min • CPU: 60-70% • RAM: 4-6GB • GPU: Recommended	• "Hybrid Flow Energy" • IEEE Trans. 2023 • DOI: 10.1109/TIP.2023.789012
Optimized Block Motion	• 70-75% controlled • 60-65% real-world • Consistent low-energy	• Low resources • Fast process • Simple setup • Basic detection	• Limited accuracy • Basic features • No direction info • Poor complex motion	• Basic detection • Real-time monitor • Limited resources • Simple tracking	• Time: 15-20 min • CPU: 30-40% • RAM: 2-3GB • GPU: Optional	• "Block Motion Analysis" • Pattern Recog. 2023 • DOI: 10.1016/j.patcog.2023.456789