

# **QUAKELOGIC**

## **QL-C40**

### **Commercial 4-in-1 Cleaning Robot**

The QL-C40 represents the next generation of autonomous commercial floor maintenance technology. Engineered for demanding institutional and commercial environments, this intelligent 4-in-1 cleaning system seamlessly integrates scrubbing, sweeping, vacuuming, and mopping capabilities into a single, autonomous platform.



Designed to serve high-traffic facilities including schools, hospitals, offices, and retail spaces, the QL-C40 delivers exceptional cleaning performance while dramatically reducing labor costs and improving operational efficiency.

# Comprehensive 4-in-1 Cleaning Capabilities

The QL-C40 eliminates the need for multiple specialized machines by consolidating four essential cleaning functions into one intelligent system. This integration not only reduces equipment investment and storage requirements but also streamlines training and maintenance protocols across your facility operations.



## Deep Scrubbing

Controlled brush pressure delivers thorough cleaning on hard surfaces, removing embedded dirt and stains with precision-engineered agitation patterns.



## Effective Sweeping

Advanced debris collection system captures everything from fine dust to larger particles, maintaining clean pathways in high-traffic areas.



## Powerful Vacuuming

Industry-leading 23,500 Pa suction removes fine particulates and allergens, improving indoor air quality while deep-cleaning carpet and hard floors.



## Finishing Mopping

Polished finishing for hard floors creates a professional appearance, leaving surfaces clean, dry, and ready for immediate foot traffic.

# Exceptional Suction Power and Performance

## Industry-Leading 23,500 Pa Suction

The QL-C40 delivers 23,500 Pa of suction power, significantly exceeding typical commercial robot specifications and rivaling traditional commercial vacuum equipment. This exceptional performance ensures thorough removal of fine dust, allergens, and embedded particulates from both hard floors and short-pile commercial carpets.

The high-efficiency filtration system captures particles as small as 0.3 microns, contributing to improved indoor air quality—a critical consideration for schools, healthcare facilities, and office environments where occupant health and comfort are paramount.

Whether tackling daily maintenance or deep cleaning cycles, the QL-C40's powerful suction system maintains consistent performance throughout extended runtime periods, ensuring reliable results across large facility footprints.

---

## Advanced Autonomous Navigation Technology

### Environmental Mapping

LiDAR sensors scan and create detailed 360° maps of the facility layout, identifying obstacles, boundaries, and optimal cleaning paths.

### Continuous Learning

The system adapts to facility changes, updates maps automatically, and optimizes cleaning patterns based on traffic and usage data.



### Path Planning

Intelligent algorithms calculate the most efficient cleaning routes, minimizing redundant coverage while ensuring complete floor treatment.

### Obstacle Avoidance

Multi-sensor fusion detects and navigates around people, furniture, and temporary obstacles in real-time, ensuring safe autonomous operation.

The QL-C40 employs sophisticated 360-degree LiDAR SLAM (Simultaneous Localization and Mapping) technology combined with multi-sensor fusion to create detailed environmental maps and navigate complex indoor spaces with precision. This advanced navigation system enables the robot to operate safely and efficiently in dynamic environments with moving obstacles, tight corridors, and furniture arrangements.

This intelligent navigation capability allows the QL-C40 to operate during business hours without disrupting normal facility operations, providing flexible scheduling options that align with your operational requirements.

# Automatic Water Management System

## Hands-Free Operation

The QL-C40 supports fully automatic clean-water refill and dirty-water drainage when paired with the optional water station. This automated water management system eliminates the need for staff to manually fill tanks or dispose of dirty water, dramatically reducing labor requirements and enabling truly autonomous multi-hour cleaning cycles.

The 16-liter clean water tank and 14-liter dirty water tank provide extended operational capacity, while the automatic fill/drain capability ensures the robot can complete large cleaning assignments without interruption or human intervention.



### Auto Water Refill

Returns to docking station when clean water runs low, automatically refills tank, and resumes cleaning.



### Auto Dirty Water Drain

Automatically drains dirty water at docking station, preventing overflow and maintaining optimal cleaning performance.



### Simultaneous Charging

Charges battery while managing water systems, maximizing uptime and operational efficiency.

## Extended Runtime and Efficient Operations

# 8hr

### Maximum Runtime

Extended battery life supports full-shift autonomous operation without interruption

# 3hr

### Fast Charging

Quick recharge cycle minimizes downtime between cleaning sessions

# 0.8

### Speed (m/s)

Optimal cleaning speed balances thoroughness with productivity

The QL-C40's intelligent power management system maximizes operational efficiency through advanced features including automatic charging, low-battery resume cleaning, and real-time performance monitoring. When battery levels drop below a preset threshold, the robot automatically returns to its docking station for recharging, then resumes cleaning from exactly where it left off—ensuring complete coverage without gaps or redundant passes.

Real-time remote monitoring capabilities provide facility managers with comprehensive visibility into cleaning operations, including coverage maps, battery status, water levels, and performance metrics. Detailed cleaning reports document areas cleaned, time spent, and system status, providing valuable data for operational planning, compliance documentation, and quality assurance programs.

This combination of extended runtime and intelligent automation enables the QL-C40 to clean large facility footprints efficiently, reducing labor costs while maintaining consistent, documented cleaning standards across your entire operation.

# Versatile Multi-Surface Performance

## Engineered for Diverse Environments

The QL-C40 adapts seamlessly to the mixed-surface environments typical of modern commercial facilities. Its intelligent surface detection and adjustment capabilities ensure optimal cleaning performance across tile, vinyl, marble, concrete, and short-pile commercial carpets—all without manual intervention or mode changes.

This multi-surface capability makes the QL-C40 ideal for facilities with varied flooring types, eliminating the need for multiple specialized machines or manual equipment changes when transitioning between different floor surfaces.



### Hard Floor Surfaces

- Tile and ceramic
- Vinyl composition
- Polished marble
- Sealed concrete
- Commercial laminate

### Carpet Applications

- Short-pile commercial carpet
- Carpet tiles
- Low-profile entry mats
- Commercial area rugs
- Mixed-surface transitions

### Facility Environments

- Corridors and hallways
- Open office spaces
- Lobbies and reception areas
- Classrooms and common areas
- Mixed-use zones

# Complete Technical Specifications

The QL-C40 combines compact dimensions with powerful capabilities, making it suitable for facilities of all sizes. Its compact 550 × 616 × 690 mm footprint enables effective cleaning in narrow aisles and tight spaces, while the 26.6 kg weight (including battery) ensures stability during operation without causing floor damage or requiring special surface considerations.

<b>Model Designation</b>	QL-C40 Commercial 4-in-1 Cleaning Robot
<b>Cleaning Functions</b>	Sweeping, Vacuuming, Scrubbing, Mopping/Dust Pushing
<b>Suction Power</b>	23,500 Pa (industry-leading performance)
<b>Navigation System</b>	360° LiDAR SLAM with multi-sensor fusion
<b>Machine Dimensions</b>	550 × 616 × 690 mm (with suction bar attached)
<b>Operating Weight</b>	26.6 kg (including battery pack)
<b>Maximum Speed</b>	0.8 m/s (optimized for thorough coverage)
<b>Clean Water Capacity</b>	16 liters
<b>Dirty Water Capacity</b>	14 liters
<b>Dust Collection</b>	8 L main bin + 0.7 L secondary filtration bin
<b>Battery Charging Time</b>	Approximately 3 hours (full charge cycle)
<b>Operational Runtime</b>	Up to 8 hours (varies by cleaning mode and conditions)
<b>Automatic Charging</b>	Yes (via included docking station interface)
<b>Auto Water Management</b>	Supported (requires optional water station)
<b>Floor Compatibility</b>	Hard floors and short-pile commercial carpet
<b>Noise Level</b>	≤ 70 dB (suitable for occupied facility operation)
<b>Connectivity</b>	WiFi-enabled app management and monitoring
<b>Reporting Features</b>	Cleaning performance logs, area coverage, device status
<b>Standard Warranty</b>	14 months (main components), 6 months (consumables)



# Ideal Applications and Package Information

## Recommended Facility Types

The QL-C40 is engineered to excel in high-traffic commercial and institutional environments where consistent cleaning quality, operational efficiency, and reliability are essential. Its advanced capabilities make it the ideal solution for facilities seeking to modernize cleaning operations while reducing costs and improving results.



### Educational Facilities

K–12 schools, universities, and educational campuses benefit from quiet daytime operation and consistent cleaning quality.



### Healthcare Settings

Hospitals, clinics, and medical centers require high-performance cleaning with detailed documentation and air quality benefits.



### Corporate Offices

Office buildings and corporate campuses value autonomous operation, professional appearance, and reduced labor requirements.



### Retail Environments

Shopping malls, supermarkets, and retail spaces benefit from flexible scheduling and consistent multi-surface cleaning performance.

## Standard Package Contents

- QL-C40 cleaning robot (main unit)
- High-capacity battery pack
- Suction bar assembly
- Cleaning brush and mop module
- Power adapter and charging cable
- Comprehensive user manual
- Docking interface plate

*Note: Auto water station sold separately*

## Optional Accessories

- Auto-charging docking station
- Auto refill/drain water station
- Extra consumable kit (brushes, filters, mop cloths)
- Extended warranty packages (12–24 months)
- Additional battery packs
- Remote monitoring dashboard upgrades

# Transform Your Facility Operations

The QuakeLogic QL-C40 represents a significant advancement in commercial cleaning technology, offering facility managers a proven path to reduced costs, improved cleaning consistency, and enhanced operational efficiency. By consolidating four cleaning functions into a single autonomous platform, the QL-C40 eliminates equipment redundancy, reduces training complexity, and delivers measurable ROI through labor savings and improved productivity.

## Reduce Operating Costs

Autonomous operation dramatically reduces labor hours while maintaining superior cleaning standards across your facility.

## Improve Cleaning Consistency

Eliminate variability in cleaning quality with documented, repeatable performance on every cleaning cycle.

## Enhance Facility Image

Maintain professionally clean environments that reflect positively on your organization and improve occupant satisfaction.

## Access Actionable Data

Leverage detailed performance reports and cleaning analytics to optimize operations and demonstrate compliance.

---

## About QuakeLogic, Inc.

QuakeLogic's Engineering & Automation Division develops innovative robotic solutions for commercial and institutional applications. Our commitment to quality, reliability, and customer success drives continuous innovation in autonomous cleaning technology, delivering measurable value to facility operations worldwide.

For detailed pricing, demonstrations, or technical consultations, contact your authorized QuakeLogic distributor or visit our website to connect with a commercial solutions specialist.

### 📄 Ready to transform your facility cleaning operations?

Contact QuakeLogic today to schedule an on-site demonstration and discover how the QL-C40 can deliver immediate operational improvements and long-term cost savings.



## Transform Your Facility with QuakeLogic Innovation

As the definitive industry leader, QuakeLogic empowers facility managers to elevate their operational capabilities and achieve unparalleled cleaning efficiency through our cutting-edge autonomous cleaning technology, featuring the QL-C40.

### Connect with QuakeLogic: Your Gateway to Advanced Facility Solutions

#### Corporate Headquarters

QUAKELOGIC INC.  
4010 Foothills Blvd. Suite 103/194  
Roseville, CA 95747, USA

#### Warehouse

2008 Opportunity Way. Suite 130  
Roseville CA 95747, USA

#### Sales & Solutions Line

+1 (916) 899-0391

Direct access for product demonstrations, sales inquiries, and facility consultations.

Available Monday - Friday, 9 AM - 5 PM PST

#### Strategic Inquiries

[sales@quakelogic.net](mailto:sales@quakelogic.net)

For strategic partnerships, enterprise-level cleaning deployments, and comprehensive information.

## Our Unwavering Commitment to Operational Excellence



#### Quality & Reliability

Adhering to and exceeding the most rigorous international and industry standards for unparalleled performance, durability, and safety in commercial cleaning equipment.



#### Autonomous Innovation

Driving innovation and setting the benchmark for autonomous cleaning technology, with a relentless focus on future-forward advancements and facility optimization.



#### Dedicated Facility Support

A bespoke partnership approach ensuring seamless integration, optimal performance, and continuous evolution of your facility cleaning operations and equipment.

## Explore Our Complete Commercial Cleaning Solutions



#### Scan to Access Cutting-Edge Solutions

Discover how QuakeLogic's comprehensive suite of advanced commercial cleaning robots and autonomous solutions can revolutionize your facility operations and elevate your maintenance programs to new, unprecedented heights.

[www.quakelogic.net](http://www.quakelogic.net)