CURE VISION

ORC SERIES
Operating Room Control Panel

Control the OR Environment. Protect the Sterile Field.

Content

ONE ROOM, TOO MANY SEPARATE SYSTEMS

Temperature, humidity, air pressure, medical gas, lighting, and electrical safety in the OR are often managed through separate, disconnected controls.

- Surgical teams lose time checking multiple devices instead of focusing on the procedure
- Manual monitoring means unsafe conditions can go unnoticed longer than they should
- Compliance records are collected by hand, room by room, procedure by procedure

ONE TOUCHSCREEN. EVERY LAYER OF THE OR.

The ORC Series brings every environmental and safety system in the operating room onto a single wall-mounted touchscreen — giving surgical teams and facility managers full visibility and control without leaving the room.

- Temperature, humidity, differential pressure and HEPA filtration
- Surgical and ambient lighting
- Medical gas alarms and isolation power monitoring
- Communication, timekeeping and audio

ENVIRONMENTAL & SAFETY CONTROL

Continuous Monitoring

- Real-time temperature, humidity, differential pressure and HEPA filter monitoring, with automatic alerts before sterility is compromised
- Medical gas alarm across all OR gas lines — audible and visual alerts on any pressure deviation, with mute and acknowledge controls, all events logged; Modbus RTU/TCP integration for gas level and alarm data
- Isolation power monitoring — leakage, temperature and current-limit breach detection; Modbus RTU/TCP and BACnet integration for power parameters and alarms
- Anesthetic gas purging, precisely controlled from the same screen
- Critical monitoring and control functions continue during power interruptions

HVAC & Building Management

- Airflow, half-damper shut-off and economic standby mode for the air handling unit
- Full integration with the hospital's Building Management System via Modbus RTU/TCP and BACnet

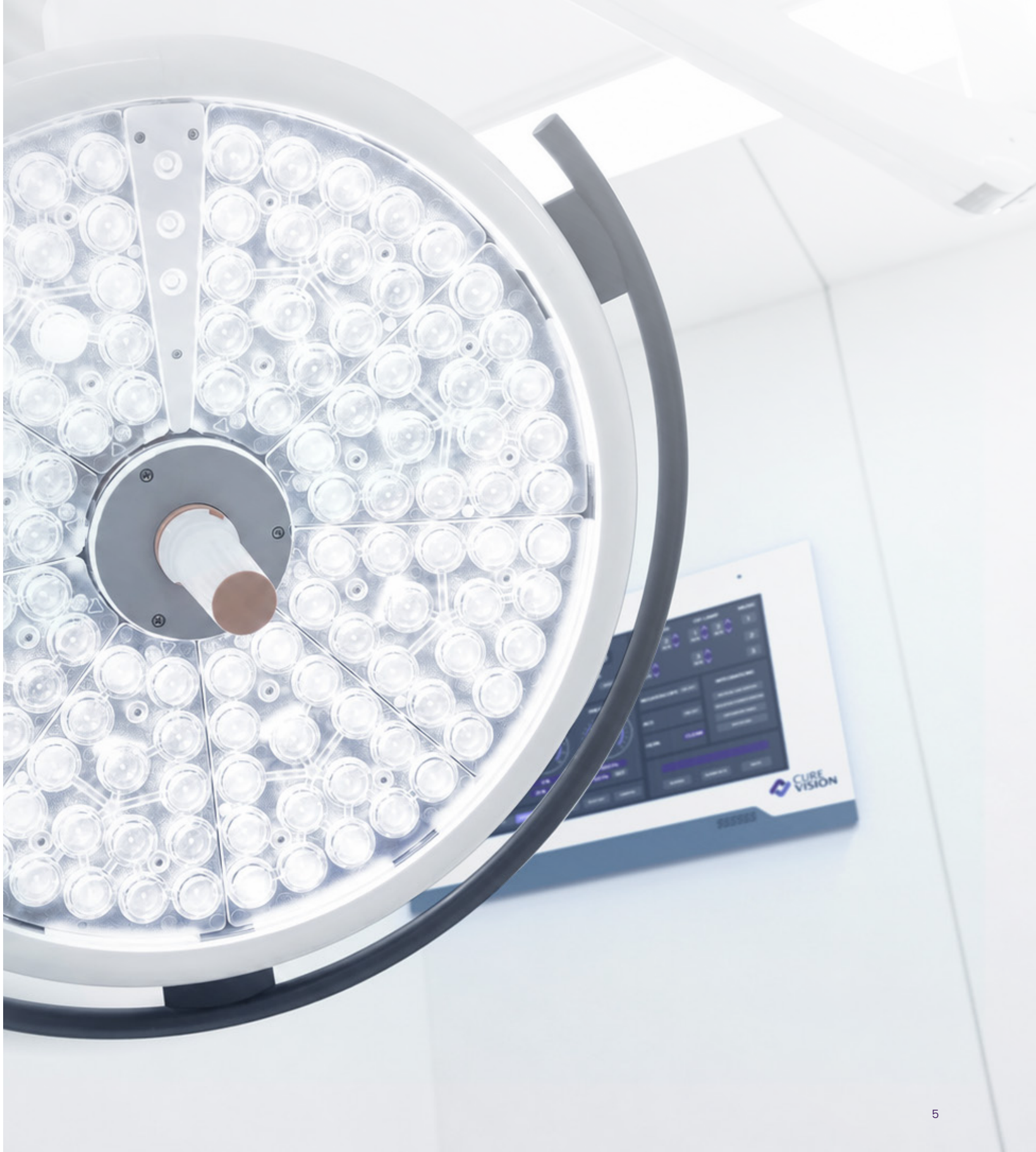
SURGICAL COMFORT & COMMUNICATION

Lighting & Equipment

- Surgical light plus 4 independent armature groups, each with individual dimming — DALI and DMX512 protocol support for brightness and color control
- Digital negatoscope control, without a separate control unit
- Optional operating table control — no dedicated pendant required

Communication & Timekeeping

- Hands-free video intercom with built-in dust-resistant microphone, speakers and web camera
- Dedicated external LED clock, timer and stopwatch module — visible independently of the touchscreen, with stopwatch display up to 100 hours
- 4-channel audio selector for switching between connected audio sources
- Output integration for an external OR status indicator outside the room



AUDIT-READY FROM DAY ONE

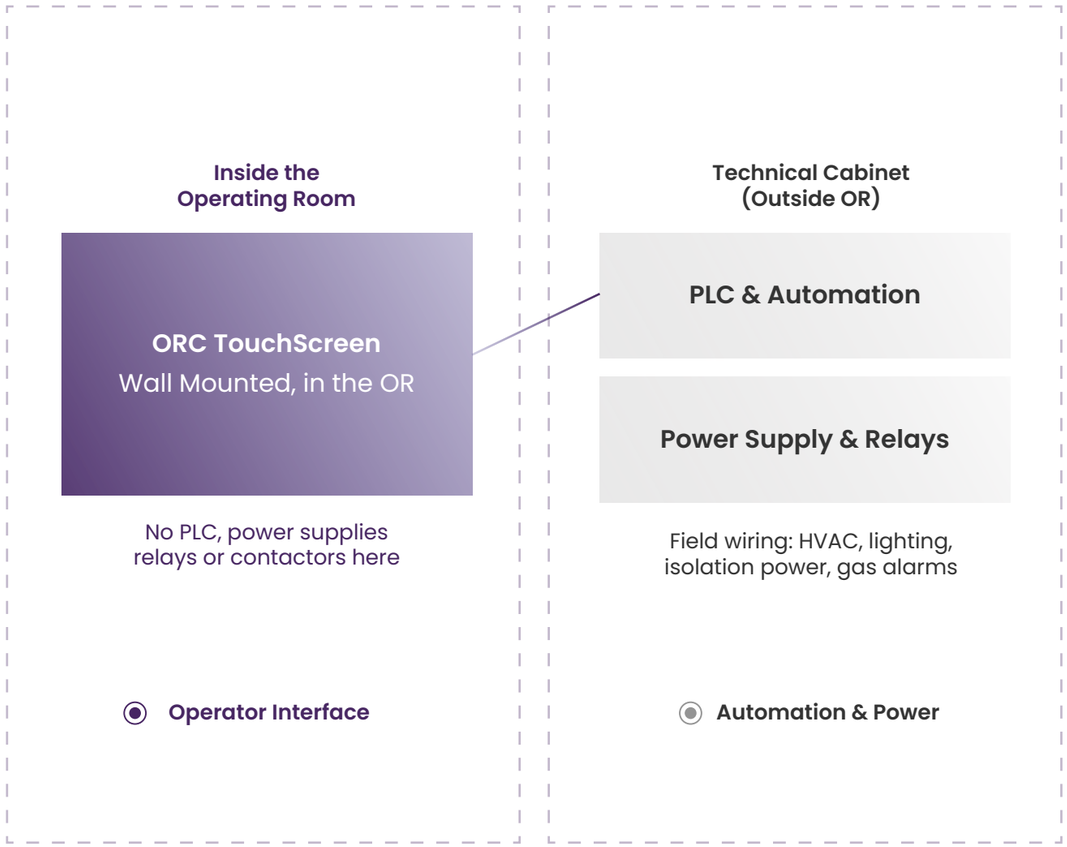
Every procedure generates its own compliance record automatically — no manual data collection required.

- Automated trend graphs for temperature, humidity, pressure and HEPA differential pressure
- Continuous, timestamped parameter archiving
- Ready for facility audits, regulatory inspection and accreditation review at any time
- Multi-level, password-protected access — only authorized staff can change critical settings

ONE INTERFACE.
AN INDEPENDENT
AUTOMATION BACKBONE.

ORC deliberately separates the operator interface from the automation and power infrastructure: the touchscreen mounted in the OR is not where the PLC, power supplies, relays and contactors live — those sit in a dedicated technical cabinet outside the room.

The touchscreen itself runs on an integrated medical-grade PC — Windows 10/11 IoT Enterprise with OS license included, Intel processor — so there's no separate computer or software licensing to source.



In systems where the PLC sits directly behind the touchscreen, thermal load, service access and future expansion all become constraints of a single enclosure. ORC's separated architecture avoids that trade-off from day one.

Better Operating Conditions	Heat-generating components stay out of the touchscreen enclosure, keeping the display and its electronics in more stable operating conditions Relay states are retained through power interruptions — except the heater control relay, which reverts to a safe position by design
Faster Service, Cleaner Fault Isolation	Technical teams service or troubleshoot the automation side from its own cabinet — no need to remove the OR wall panel Interface-side and automation-side issues are diagnosed independently, so root cause is found faster Physical access to automation and power components stays with authorized technical staff
A Simpler, Cleaner OR Wall Unit	Field wiring from HVAC, lighting, the isolation transformer and gas sensors terminates at the technical cabinet — not routed into the OR wall unit Fewer electronic and electrical components inside the OR keep the wall panel thinner and less cluttered
Built to Expand	New I/O points, relays or automation modules can be added in the technical cabinet without touching the touchscreen If interface technology changes down the line, only the operator interface needs to be redesigned — the automation backbone stays in place

CHOOSE YOUR CONFIGURATION

21″

17″ 19″

Model	Screen Size	Touch Technology	Best Suited For
ORC-417	**17"**	Resistive touch	Compact ORs with limited wall space
ORC-419	**19"**	Resistive touch	Standard OR — the most widely selected configuration
ORC-421	**21"**	Capacitive touch	Larger ORs where multiple operators need simultaneous visibility

- All three models share the identical full feature set — screen size and touch technology are the only differences

All models: IP65-rated front panel, slim radial fan, built-in wall installation, universal 110–220V AC (50/60 Hz) power input, and rated for continuous 0–60°C operation.

Built with 4mm tempered glass and a stainless steel housing for durability in demanding OR environments, with dual Gigabit Ethernet connectivity built in.

ORC-421 uses a capacitive multi-touch display that is scratch-resistant and fully operable with surgical gloves.

CERTIFIED FOR THE OR

EN 60601-1:2006+A13:2024 compliant

basic safety and essential performance for medical electrical equipment

EN 60601-1-2 compliant

EMC Directive 2014/30/EU, tested for immunity and emissions (ESD, radiated RF, fast transient/burst, surge, conducted disturbances, power-frequency magnetic field, CISPR 11 emissions — test ref. EMC26-023)

IP65-rated front panel, disinfectable with standard hospital agents

BMS compatible

Modbus RTU/TCP and BACnet integration

Hygienic design approved

Tested to keep performing reliably alongside electrosurgical units, imaging systems and the other RF sources found throughout a live OR.

BUILT FOR EVERY OR STAKEHOLDER

Hospitals & Surgical Centers	One panel and one compliance package that scales room by room.
Perioperative & OR Management	Faster turnover between procedures and audit-ready traceability without manual logging.
Healthcare Risk & Compliance	A complete, timestamped environmental record for every procedure, from day one.
IT & Biomedical Teams	BMS-compatible and low-maintenance, with no rewiring required.

BACKED BY CUREVISION

- Medical device manufacturer founded in 1994 — 30+ years in the field
- In-house design, manufacturing and certification, end to end
- 50+ specialists across hardware, software and clinical implementation
- Headquartered in Montreal, Canada, with manufacturing and R&D in Istanbul, Türkiye

ORC IN ACTION

During a procedure, the surgical team works in a fully controlled environment. Temperature, airflow and gas levels are monitored in real time on the ORC panel, with alarms triggered automatically the moment any parameter drifts out of range — no manual checks, no separate monitoring devices, no interruption to the sterile field.

CURE VISION

See ORC Configured for Your OR

Our team will walk you through installation options, BMS integration, and compatibility with your existing OR infrastructure.

Request a Demo

Contact