

Solutions for **HEALTHCARE**



- Provide safety and security to employees and constituents
- Emergency Operations and 24/7 up time
- Suppliers with Scale

EXTECH
INSTRUMENTS
A FLIR COMPANY

FLIR[®]



HAZMASTERS
CREATING SAFE WORK ENVIRONMENTS

hazmasters.com

Branches across Canada

877.747.7117

Healthcare Issues

The Patient Experience

Problem: Noise levels disrupt patient rest and healing



Solution: Alert staff and visitors to noise violations with Extech sound level meters and monitor/alarms

Problem: Patient rooms are too hot/cold



Solution: Balance airflow for better heating/cooling distribution with Extech anemometers

Problem: Patients complain of poor lighting in rooms



Solution: Monitor lighting levels throughout patient rooms with Extech light meters

Electrical & Plant Engineering

Problem: Unexpected equipment breakdown



Solution: Ensure operational reliability and redundancy with Extech meters and testers

Problem: Failing electrical and safety inspections



Solution: Investigate electrical safety violations with FLIR thermal imagers

Problem: Downtime affecting patient care systems



Solution: Maintain care-related systems and standby genset power quality

Facilities Maintenance

Problem: Aging hospital buildings are letting heating/cooling escape



Solution: Effectively diagnose building envelope leaks using FLIR thermal imagers

Problem: Staff complain of damp areas



Solution: Monitor temperature and humidity trends with Extech digital chart recorders

Problem: Water leaking into top floor



Solution: Trace leaky roof membranes and moisture intrusion

HVAC/R & Mechanical

Problem: Cascading failures in complex plant HVAC/mechanical systems



Solution: Effectively troubleshoot HVAC components with Extech multifunction HVAC/R meters

Problem: Poor heating and cooling effectiveness



Solution: Trace leaky ducts with FLIR thermal imagers

Problem: Condensation found in patient rooms



Solution: Track condensation risks from ceiling beam systems with Extech moisture meters

Infectious Disease Control

Problem: Infectious disease can shut down hospital operations



Solution: Develop achievable pandemic emergency plans

Problem: Patients and staff at high risk of exposure



Solution: Implement easy-to-use non-contact tools from Extech to minimize exposure

Problem: Contagious patients put others at risk of infection



Solution: Screen for elevated body temperature at all entry points with Extech IR meters

Air & Environmental Quality

Problem: Poor indoor air quality affecting staff and patients



Solution: Tune systems for healthy IAQ with Extech CO, CO2, humidity, and temperature meters

Problem: Lighting levels vary widely throughout hospital



Solution: Perform photometry audit with Extech datalogging light meters

Problem: Noise levels can affect NICU patient care



Solution: Use Extech sound level alert with visual indicators to highlight noise violations

Extech and FLIR Tools Get the Job Done

Extech meters and FLIR thermal cameras help you ensure high patient care scores, minimize care disruptions, and implement JCAHO compliance. Whether used as a component of an effective predictive maintenance program or as a key tool for integrated facilities maintenance, Extech and FLIR are the tools of choice for solving problems fast and minimizing disruptions.

Clamp Meters



Used for

- Circuit loads up to 3,000 A
- Voltage, resistance, capacitance, contact and non-contact temperature measurements

Applications in Healthcare

- Checking current load of HVAC and refrigeration units
- Troubleshooting electrical distribution systems
- Repairing building transportation systems

Digital MultiMeters



Used for

- Essential electrical testing
- Identifying inrush, spikes and sags
- Non-contact voltage detection

Applications in Healthcare

- Upgrading electrical panels
- Test and repair electronics systems (security, communication, etc.)
- Installing programmable lighting in assembly halls

Thermometers



Used for

- Contact or non-contact temperature measurements
- Differential temperature calculations
- Monitoring moving components

Applications in Healthcare

- Inspecting food refrigerators
- Reading vent temperatures
- Employee/customer screening for infectious disease symptoms

Power Analyzers



Used for

- Diagnosing power quality issues
- Monitoring electrical demand trends
- Identifying equipment inefficiency

Applications in Healthcare

- Benchmark energy usage
- Balance energy usage around on- and off-peak times
- Test 3-phase equipment
- Identify utilities-related issues

Tachometers



Used for

- Measuring motor conveyor and belt speed
- Reducing premature wear

Applications in Healthcare

- Calibrate speeds of escalators, moving walks, elevators, etc.
- Measure HVAC motor and belt speeds
- Test automatic door speeds

Environmental Meters



Used for

- Monitoring humidity, temperature, and airflow
- Measuring light, noise levels
- Monitoring CO and CO2 levels

Applications in Maintenance

- Ensure Indoor Air Quality
- Monitor dryout after water damage restoration
- Check for light and sound compliance in workplace

Electrical Testers



Used for

- Tracing outlets to breakers
- Testing continuity in circuits
- Identifying rotary field indication

Applications in Healthcare

- Installing energy-saving electrical equipment
- Repairing outlet and switch issues
- Identify/trace unmarked wiring

Inspection Tools



Used for

- Electrical equipment diagnostics
- HVAC diagnostics
- Building envelope inefficiency

Applications in Healthcare

- Inspecting hard-to-reach areas
- Find energy losses in buildings
- Quickly scan electrical components for overheating



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