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Liebert Liqui-tect® Leak Detection and Reporting

Monitoring Solutions

COMPREHENSIVE DETECTION OF WATER BASED LEAKS IN CRITICAL SPACES



*Accurate, Reliable Systems For
Detecting, Locating And Reporting
Leaks In Computer Rooms,
Telecommunications Centers
And Other Facilities Housing
Sensitive Electronic Equipment.*



WATER DAMAGE CAN BE A CATASTROPHIC EVENT FOR COMPUTERS AND NETWORKS

Your critical computing, communications or process control facility could be exposed to water – and you may not even know about it until it's too late. Water damage due to leaking pipes, sprinkler systems, leaking roofs and other causes is far more common than realized.

What risks exist in your facility?

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Leaking Roof

Can allow substantial amounts of water to enter the shelter over time.

Unattended Facility

Remote communications shelters require monitoring to protect against damaging water leaks.

Flooding

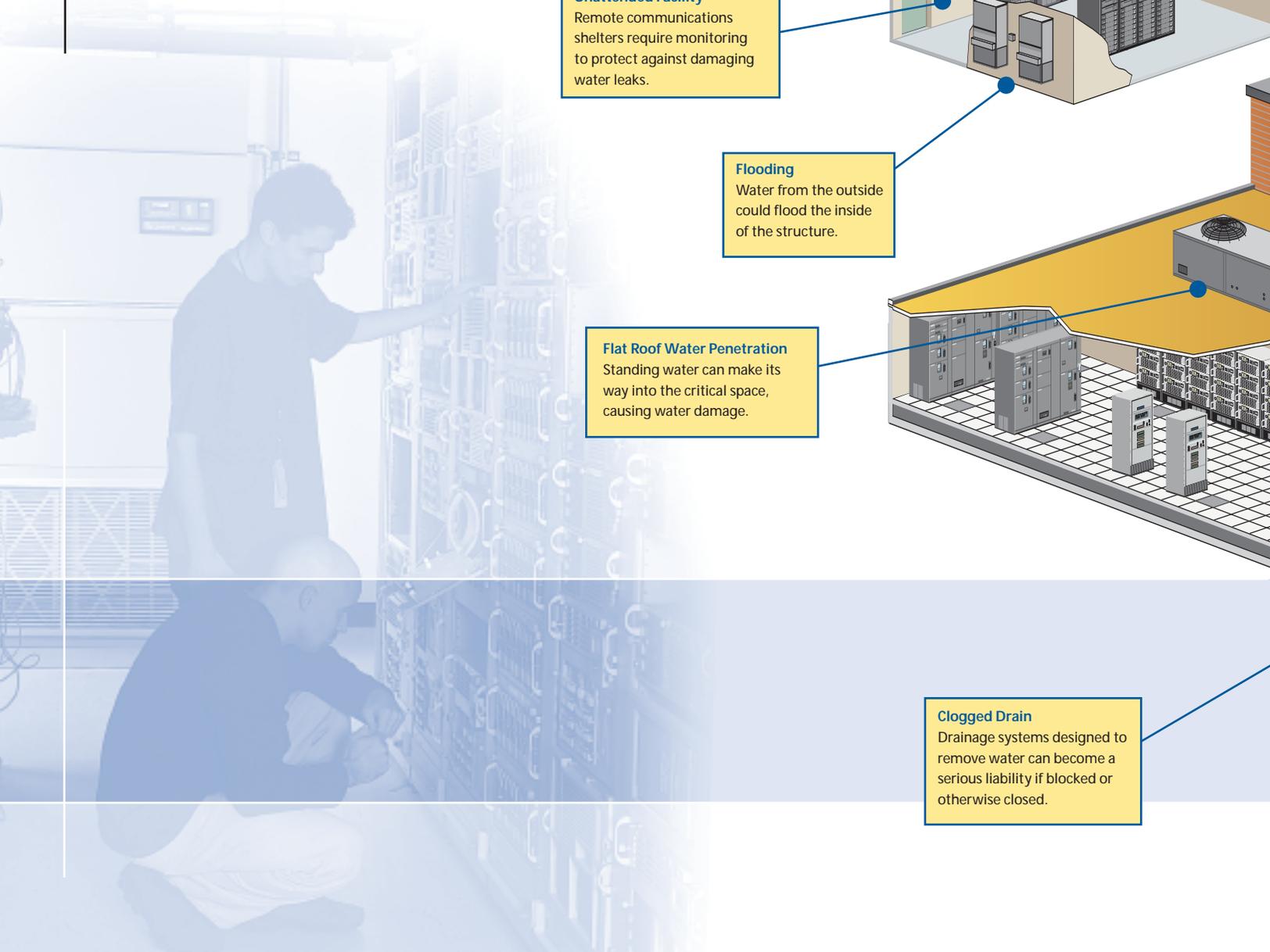
Water from the outside could flood the inside of the structure.

Flat Roof Water Penetration

Standing water can make its way into the critical space, causing water damage.

Clogged Drain

Drainage systems designed to remove water can become a serious liability if blocked or otherwise closed.



Liebert is the one source that can help you avoid these problems with a full range of leak detection and reporting systems.

Plumbing

Any water piping located near critical equipment poses a risk if leaks develop.

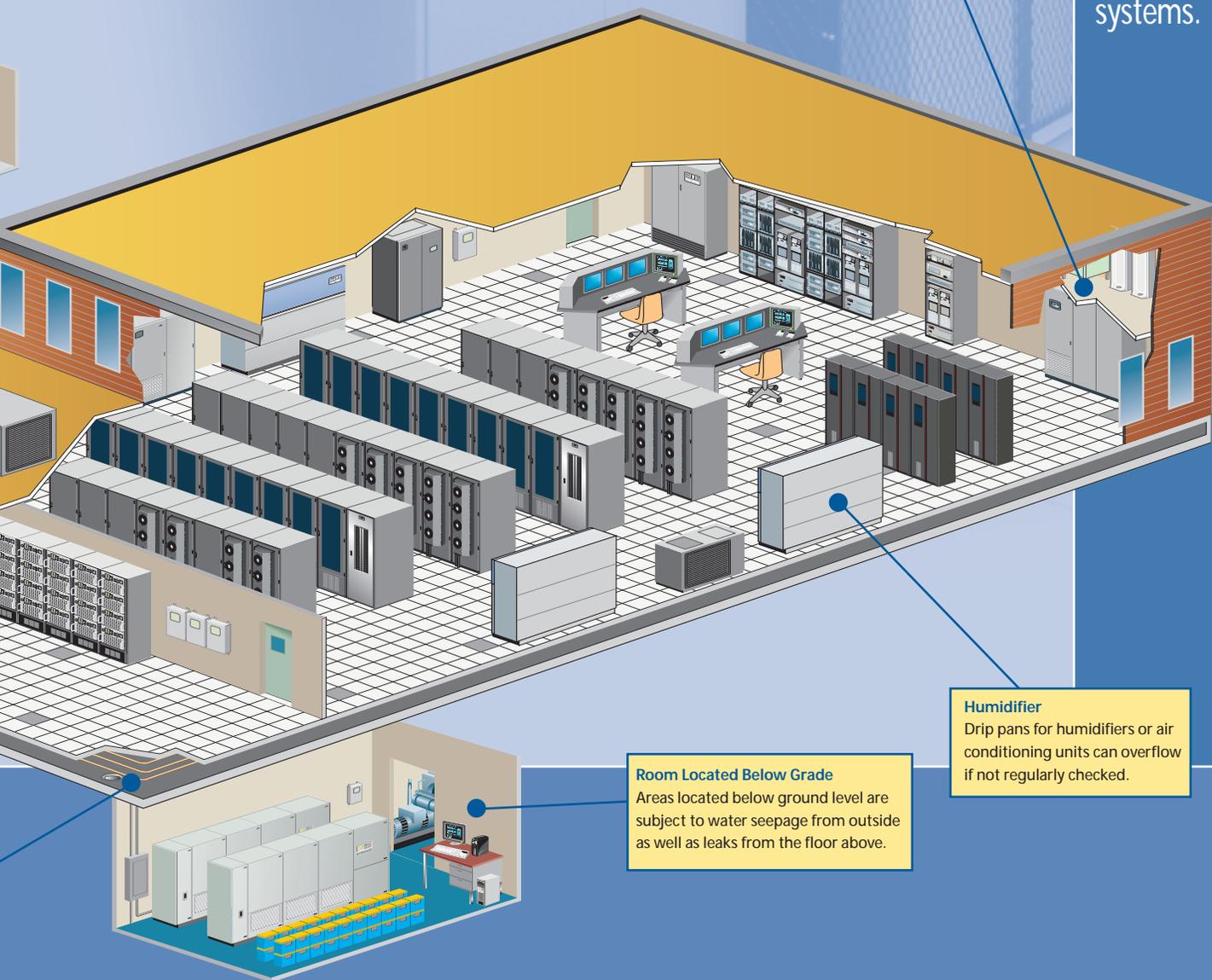
- sprinkler systems
- waste systems
- condensate piping
- chilled water piping
- condenser water piping

Humidifier

Drip pans for humidifiers or air conditioning units can overflow if not regularly checked.

Room Located Below Grade

Areas located below ground level are subject to water seepage from outside as well as leaks from the floor above.



LIEBERT LIQUI-TECT® — YOUR BEST SOLUTION FOR LEAK DETECTION

Liebert leak detection systems deliver quick and accurate notification at the first sign of trouble. They also offer the ability to interface with your monitoring and building management systems to provide the broadest possible range of communication.

Liebert Liqui-TECT® leak detection systems provide accurate reporting of leaks below the floor, above the ceiling or at the perimeter of a room in critical facilities. These reliable systems provide immediate warning and precise location, allowing you to find and correct a leak before moisture can damage computers, wiring connections or other sensitive electronics.

Liebert Liqui-TECT leak detection systems are ideal for a variety of locations, including:

- Computer rooms.
- Large-scale network control centers.
- Telecommunications facilities.
- Satellite ground stations and other specialized data communications nodes.
- Industrial process control rooms.
- Any location where water can cause problems.

Applications:

- Glycol, condenser water and chilled water cooling piping leak.
- Humidification feed water piping.
- Condensate pumps and drains.
- Unit and ceiling auxiliary drip pans.
- Overhead piping.



Liebert Liqui-TECT Monitoring System Two Channel Direct-Read Leak Detection

Liebert brings you the ultimate in leak detection and reporting capabilities. The Liebert Liqui-TECT Monitoring System provides two channels for monitoring different areas with direct-read at the control unit location, as well as the ability to communicate with Liebert's SiteScan Web enterprise monitoring system or a building management system.

User-Friendly — The Liebert Liqui-TECT Monitoring System features an easy-to-use liquid crystal display (LCD) panel with readout of normal and alarm conditions, as well as leak location. Display and measurement modules are contained in a single compact package.

Installation Flexibility — The slim profile of the monitoring panel enables the Liebert Liqui-TECT Monitoring System to be mounted on a wall or recess-mounted within a wall. A choice of two different panels sizes provides flexibility to meet application needs. The panels are made of metal to accommodate secure conduit fittings and protect components against environmental debris.

Two Channel Capability with Accurate Sensing — The Liebert Liqui-TECT Monitoring System has two independent channels to monitor two different areas. Each channel can monitor up to 5000 feet of Liebert LT500Y leak cable. Single-person mapping makes it easy to configure within the critical space. The system determines the location of water on the detection cable and reports the distance from the Liqui-TECT Monitoring System, in feet or meters. Within seconds of detection, the measurement is flashed on the display panel, allowing you to take prompt action to correct the leak and prevent damage. To ensure proper protection, the system continuously monitors operation, signaling system normal, leak detected and cable fault.

Outstanding Features And Monitoring Versatility

Liebert Liqui-TECT Zone And Point Leak Detection Sensors

Liebert Liqui-TECT zone and point leak detection systems install quickly and work simply for reliable warning of potentially hazardous water leaks. Liqui-TECT leak detection sensors offer many outstanding features, including:

Standard Dry-Contact Output

Sensors are easily monitored by numerous monitoring systems and equipment such as Liebert environmental equipment via local alarm contact. Also compatible with Liebert's SiteScan Web enterprise monitoring system and third-party equipment.

Dual Output Relays

Two independent outputs provide added flexibility to signal a local alarm panel, a remote building management system or external equipment such as a water shut-off valve.

Supervised Operation

Sensors constantly monitor for leaks, internal fault and power failure, warning of any abnormal conditions.

Easy Installation

Separate power and signal wires simplify circuitry needs. Mounting brackets allow for sensor height adjustment and leveling (Liqui-TECT 410). Convenient kits are available pre-packaged with sensor, cable and hold down clips (Liqui-TECT 460).

Liebert Liqui-TECT 410 (point sensor)



Liebert Liqui-TECT 410 sensor offers leak detection at critical points under a raised floor. Two corrosion-resistant gold-plated probes detect moisture and immediately signal the monitoring system, allowing fast action to be taken before mission-critical equipment is damaged.

Liebert Liqui-TECT 460 (zone sensor)

Liebert IT500Y Leak

Detection Cable offers

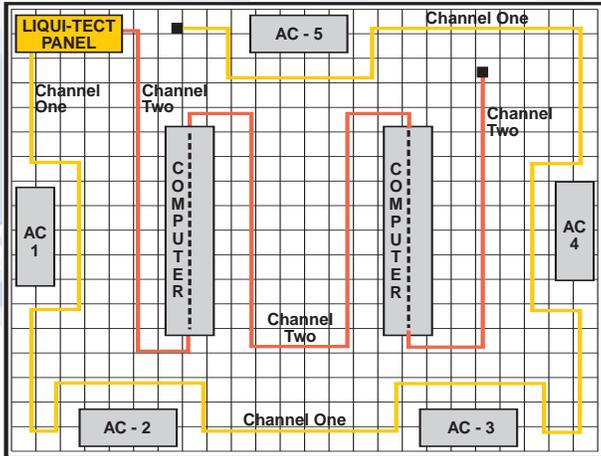
durable design for accurate sensing and the ability to read and report the exact position of the leak. Liebert leak detection cables have a multi-wire design for precise identification of moisture and signaling. Rugged, durable materials resist corrosion and abrasion for long cable life. The cable's non-kink design makes it easy to position around equipment. After a leak is corrected, the cable sheds liquid quickly for an easy return to normal conditions.

Liebert IT500Y leak detection cable is designed for easy installation and unlike other sensing cables does not exhibit memory. This means that the installation goes in easier and does not require additional attention to how flat the cable is laying on the floor. Likewise, mating connectors on each end make installation and removal simple.

Extra lengths of cable can be added to the end of the cable or any spot along the length of the cable where mating connectors are found. The thermally bonded cable is rated at 176° F (80° C) and is plenum rated. UL-listed for safe operation, IT500Y leak detection cable is available in 15, 35 and 50 feet lengths.

Liebert Liqui-TECT 460 sensor provides zone detection of leaks up to 100 feet. Designed for use with Liebert IT500Y leak detection cable, the Liqui-TECT 460 is the ideal solution for perimeter sensing or serpentine coverage of small areas. Selectable modes of operation provide flexible alarming options and protection for the cable. Selectable alarm delays minimize false-positive conditions. Top cover LEDs primarily provide status indication, but the LEDs also ensure the sensor is easily located under raised floors. If obtained in a kit, cables are available in lengths of 20, 25, 30, 35 and 45 feet.

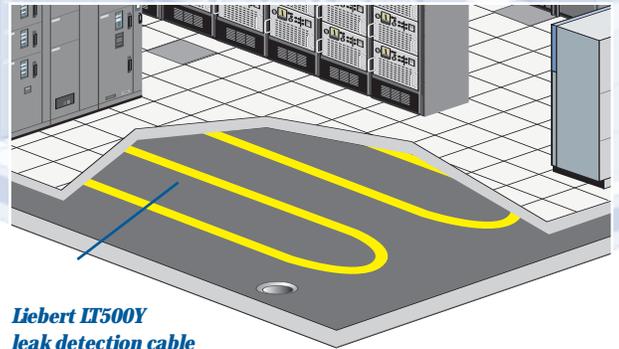
THERE IS A LIEBERT LEAK DETECTION SYSTEM TO MEET THE NOTIFICATION NEEDS OF ANY SITE



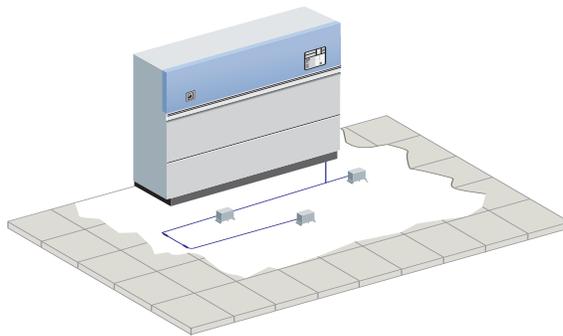
Liebert Leak Detection Systems can be configured to match the protection needs of any site.

Liebert Liqui-TECT Monitoring System – Two Channel Direct-Read Leak Detection Cable Layout

When used with the Liebert Liqui-TECT panel, Liebert LT500Y leak detection cable is laid in a continuous pattern around potential leak points located throughout the room. Up to 5,000 feet of leak detection cable can be connected to each channel.

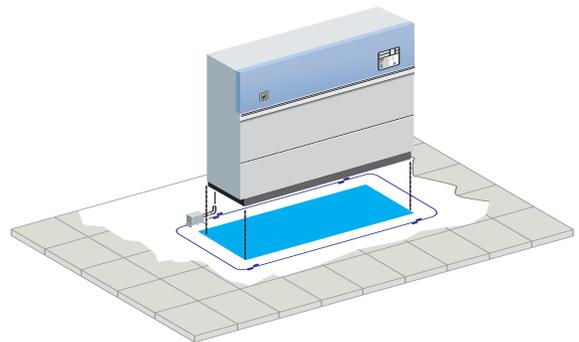


Liebert LT500Y leak detection cable



Liebert Liqui-TECT 410 Point Leak Detection Configuration

Typical installation of a Liebert Liqui-TECT 410 leak detection system used to monitor the space surrounding a Liebert Deluxe System™/3 precision air conditioning unit.

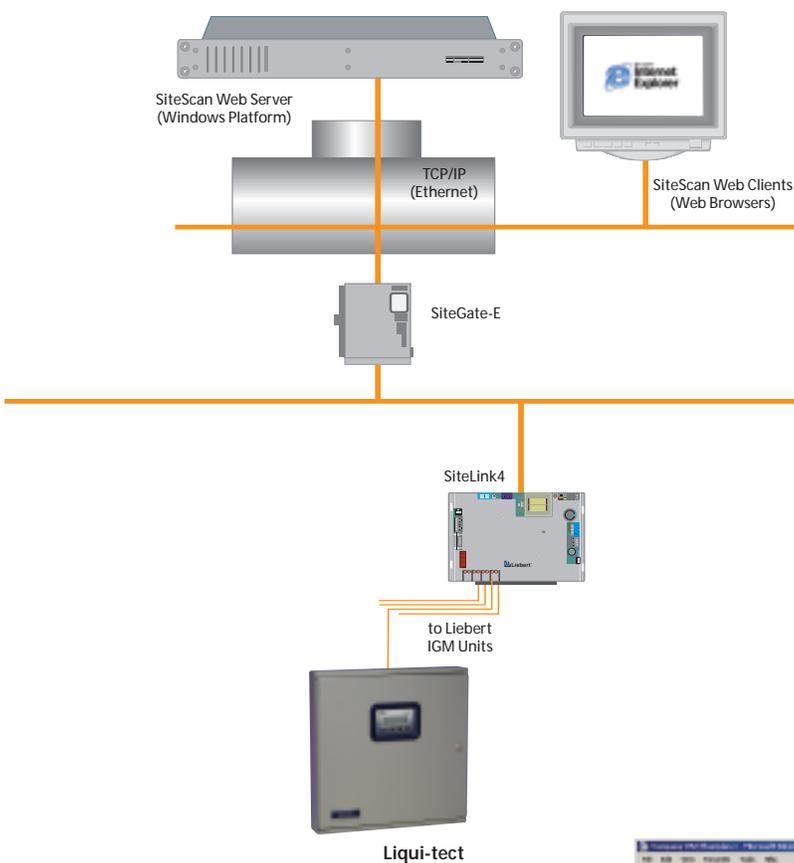


Liebert Liqui-TECT 460 Zone Leak Detection Configuration

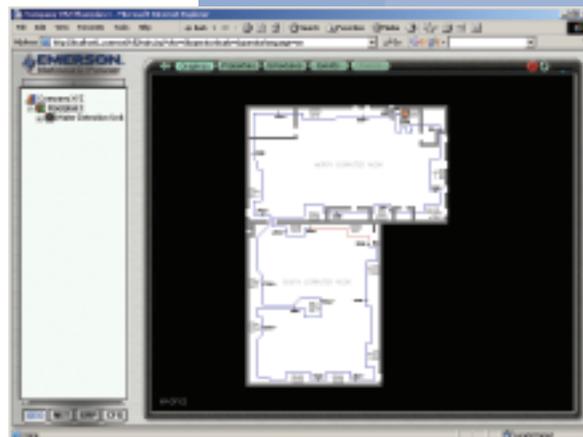
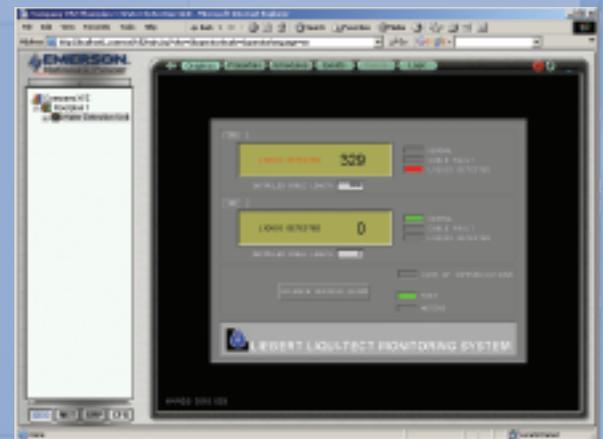
The Liebert Liqui-TECT 460 uses flexible cable for zone monitoring. Here the system is shown connected directly to a Liebert Deluxe System/3 precision air conditioning unit. Cable should be placed 2 to 6 feet away from the equipment being monitored. Two hold down clips should be used every 6 to 8 feet.

Leak Detection: Just Part Of An Overall Critical Facility Monitoring Strategy

Liebert Liqui-TECT leak detection systems are designed to work seamlessly with Liebert's SiteScan Web enterprise monitoring system, a web-based site monitoring and control solution for computer support equipment and other critical facility applications. Liebert interface hardware allows connection of the leak detection controls to the enterprise monitoring system.



The Liebert Liqui-TECT Monitoring System's control unit incorporates a built-in liquid crystal display (LCD) panel which provides a readout of operating conditions including alarms and leak locations.



Liebert's SiteScan Web monitoring system can graphically represent your leak detection layout in 2-dimensional and 3-dimensional floorplans.

TOTAL CONFIDENCE IN THE DECISION YOU'VE MADE



Liebert Liqui-tect® Leak Detection and Reporting

Monitoring Solutions

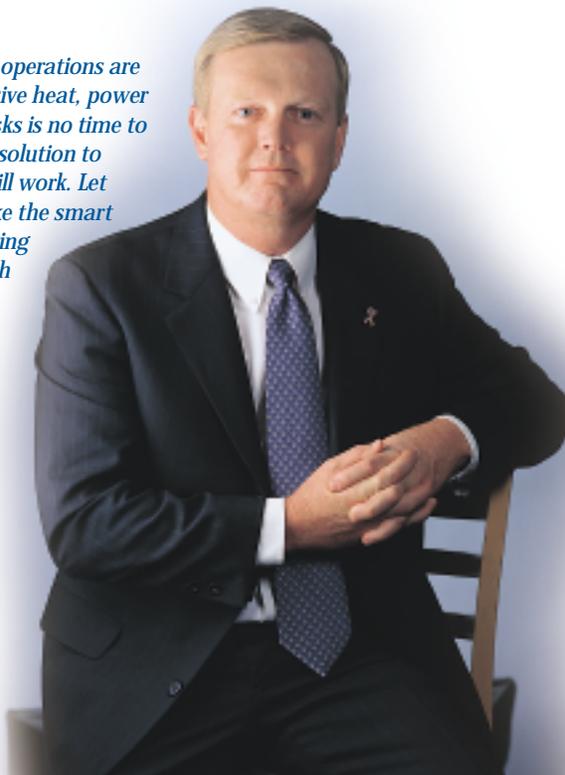
No organization in the world today has a better understanding of exactly what it takes to keep critical information and industrial processes operating continuously than Liebert.

It starts with your local Liebert Representative, Distributor or Reseller. We are the only company in this business that maintains such a strong local presence on a national and international basis. This resource, coupled with our broad product line, gives Liebert the ability to create a "tailored solution" that will meet your protection needs precisely and efficiently.

With your purchase of a Liebert product, you are buying into a company that stands behind its products. You are also aligning yourself with an organization that has a reputation for quality and reliability that is second to none.

In the systems protection business it's when you need someone to count on that you find out whether you've made the right choice. Liebert customers — many of them with us for over three decades — already know how good their decision was.

The day your critical operations are threatened by excessive heat, power problems or other risks is no time to find out if a "simple" solution to system protection will work. Let Liebert help you make the smart decision about assuring reliability in your high availability facilities.



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