

Seeker

Leakage Detector

- High Performance, Frequency-Settable Leakage Detector
- Ideal for Drive-Outs, Pinpointing Leak Location, and Troubleshooting
- Large Numerical Measurement Display
- Sensitive, Stable Measurements, Channel Tag Compatible
- Data Storage and Upload for Documentation

The Seeker™ is a frequency-agile leakage detector specifically designed for efficient distribution leakage management, displaying numerical measurements of leaks on up to ten selectable channels, and emitting a tone proportional to leak strength.

Mobile or Hand-Held

The Seeker may be used in its mobile mount (included) for drive-outs, or easily removed from the mount for leakage troubleshooting on foot with a rubber duck antenna (included), or optional dipole antenna.

Stable, repeatable readings, multi-frequency operation, and leakage recording simplify leak location and documentation.

Comprehensive Coverage

Durable, simple to use, and very cost-effective, the Seeker is the flagship of a new generation of Trilithic leakage products, which includes the popular Seeker Lite™ installation leakage detector.

A workforce that includes both of these leakage measurement instruments

ensures leakage-free networks from subscriber to head-end.

Flexibility

With the initial Seeker system costs being scalable for any number of vehicles, the Seeker Family of leakage detectors offers an unprecedented level of customizable, fleet-based leakage detection options. You can start from fully-manual leakage detection with the Seeker alone and upgrade to find and fix leakage management with the Seeker GPS™ and Leakage Analysis Workshop™ (LAW), and even upgrade again to fully automated leak reporting with the Seeker BB-2™. Equip your fleet with any combination of Seeker, Seeker GPS, or Seeker BB-2 for total leakage management simplification.

Channel Tag Compatible

The Seeker includes technology compatible with the Trilithic CT-2™ or CT-3™ channel taggers. The Trilithic CT-2 or CT-3 channel tagger is installed in the head-end and used with Trilithic's leakage receivers to help identify leakage sources in overbuilt areas, to increase detection range, and to increase immunity to interference.



Data Management

The Seeker Setup™ software configures the Seeker, enabling operator to assemble files containing channel frequencies, squelch levels, audio volume, and other settings. With this software, the operator can efficiently download configurations to one or more leakage detectors.



SPECIFICATIONS

Frequency Range	Low band: 109.25 to 110.5 MHz High band: 118.5 to 147.25 MHz Settable using the Seeker Setup software, in 6.25 KHz steps
Frequency Settings	10 user-set operating frequencies, selectable on front panel Selections loaded into detector using Seeker Setup configuration software
Calibrated Level Range	2 to 2000 $\mu\text{V/m}$ Can freeze current numeric reading
Numerical Display	Readout of any detected leakage within sensitivity range
Audible Tone	Tone is present if leakage amplitude exceeds squelch setting Pitch is proportional to strength of leak
Automatic Noise and Overbuild Discrimination	Internal circuitry discriminates between leaks and noise Overbuild discrimination requires the CT-2 or CT-3 channel tagger to be installed in the hub or head-end
Data Connection	Serial data connection for setup and leakage record upload
Power	Internal battery with eight hours of operation per charge
Options	Semi-rigid protective holster with belt loop
Supporting Software	Seeker Setup software for configuring the Seeker for leakage detection and Wi-Fi uploading of leakage data records to LAW Server software LAW Server software for uploading and processing leakage data records

INCLUDES THE FOLLOWING:

Seeker leakage detector
P/N 2011073101

Rubber duck antenna

Battery charger

I/O-20 mini-USB charge/data cable

SMB-2 mobile mount

Mobile mount power cable

User's manual and software drivers on CD

OPTIONAL ACCESSORIES:

CC-28 padded holster
P/N 2131249000

CL-9 vehicle power adapter
P/N 0610169007

RELATED ITEMS:

AFS-2 dipole antenna
P/N 2010436000

APM-2 permanent mount, vertical quarter-wave whip antenna (108 to 118 MHz)
P/N 2010649000

APM-3 permanent mount, vertical quarter-wave whip antenna (119 to 160 MHz)
P/N 2010650000

AVM-2 magnetic base, vertical quarter-wave whip antenna (108 to 118 MHz)
P/N 2010380000

AVM-3 magnetic base, vertical quarter-wave whip antenna (119 to 160 MHz)
P/N 2010379000

Seeker pole mounting kit
P/N 2071802000

NFP-1 near field probe
P/N 2010477000

Leakage Analysis Workshop (LAW) integrated server package
P/N 2011190100

Leakage Analysis Workshop (LAW) server software
P/N 0930126000

Garmin® GPS receiver
P/N 2071707000

Mobile communications adapter (MCA) with hard-wired serial data connection
P/N 2011029104

Mobile communications adapter (MCA) with hard-wired serial data connection and Wi-Fi option
P/N 2011029105

Industrial-grade Wi-Fi access point
P/N 2011222000

CT-2 channel tagger
P/N 2010670001

CT-3 channel tagger
P/N 2010762000

Seeker GPS

Leakage Management System

- High Performance, GPS-Based Leakage Management System; Ideal for Drive-Outs, Leak Documentation, and Troubleshooting
- Very Cost-Effective, Allowing General Deployment Throughout Entire Fleet, with Complete Mobile Installation While Costing Less Than Some Leakage Detectors
- Maximum Efficiency Achievable Through Totally Automatic Operation; Leakage Record Upload via Internet or Wi-Fi



Trilithic's Seeker GPS™ leakage management system offers high-performance GPS leakage detection and documentation at a price no greater than that of a conventional leakage detector. No investment for special drive-out vehicles is required, and every truck in the operator's fleet can identify leakage outbreaks with GPS precision.

Automatic leak recording

The system is built around Trilithic's powerful Seeker leakage detector. While driving to a location or to work, the technician leaves the Seeker in the mobile mount, where it's connected to vehicle power, an antenna, and a GPS receiver. The system automatically monitors leakage outbreaks and records the data with a time/date stamp and the leak's GPS location. This automatic process helps keep the technician from being distracted while driving or working. The Seeker unit can also be easily removed from its mount for manual leakage detection and recording, if necessary.

Convenient uploading

Using the built-in Wi-Fi adaptor, uploading data records to a server can be fully automated, occurring whenever the vehicle enters the yard or stops at an operator-controlled Wi-Fi hot-spot. The records may also be uploaded via an Internet connection if the technician is based remotely.

Seamless analysis applications

Leakage records can be forwarded seamlessly to various leakage analysis applications to analyze data and further identify probable leak locations.

GPS component options

The operator has several options for providing the GPS receiver/antenna to link with the Seeker GPS system. If there is no existing unit, one can be obtained from Trilithic or purchased from an approved list of vendors. If the vehicle is already equipped with a fleet management system using an approved GPS receiver, in many cases the Seeker GPS system can make use of it.

Powerful, flexible, convenient, and very cost-effective; the Seeker GPS system from Trilithic sets an entirely new standard for GPS leakage management.

Seeker GPS

Leakage Management System

SPECIFICATIONS

Frequency Range	Low band: 109.25 to 110.5 MHz High band: 118.5 to 147.25 MHz Settable using the Seeker Setup™ software, in 6.25 KHz steps
Frequency Settings	10 user-set operating frequencies, selectable on front panel Selections loaded into detector using Seeker Setup configuration software
Calibrated Level Range	2 to 2000 µV/m Can freeze current numeric reading
Numerical Display	Readout of any detected leakage within sensitivity range
Audible Tone	Tone is present if leakage amplitude exceeds squelch setting Pitch is proportional to strength of leak
Leakage Sampling and Recording Rate	1 record per second, continuous
Automatic Noise and Overbuild Discrimination	Internal circuitry discriminates between leaks and noise Overbuild discrimination requires the CT-2™ or CT-3™ channel tagger installed in hub or head-end
Data Connection	USB connection to local PC running upload applet, internet connection from client to server Via Wi-Fi to operator-controlled and configured hot-spot Through the wireless link of some fleet management systems
Power	Internal battery with eight hours of operation per charge
Options	Semi-rigid protective holster with belt loop for use out of the mobile mount
Supporting Software	Seeker Setup software for configuring Seeker GPS for leakage detection and Wi-Fi uploading of leakage data records to LAW Server software LAW Server software for uploading and processing leakage data records

INCLUDES THE FOLLOWING:

Seeker GPS leakage detector
P/N 2011073101

Rubber duck antenna
SMB-2 mobile mount

Mobile mount power cable
User's manual and software drivers on CD

OPTIONAL ACCESSORIES:

CC-28 padded holster
P/N 2131249000
CL-9 vehicle power adapter
P/N 0610169007

RELATED PRODUCTS:

AFS-2 dipole antenna
P/N 2010436000
APM-2 permanent mount, vertical quarter-wave whip antenna (108 to 118 MHz)
P/N 2010649000
APM-3 permanent mount, vertical quarter-wave whip antenna (119 to 160 MHz)
P/N 2010650000
AVM-2 magnetic base, vertical quarter-wave whip antenna (108 to 118 MHz)
P/N 2010380000
AVM-3 magnetic base, vertical quarter-wave whip antenna (119 to 160 MHz)
P/N 2010379000
Seeker pole mounting kit
P/N 2071802000
NFP-1 near field probe
P/N 2010477000
Leakage Analysis Workshop (LAW) integrated server package
P/N 2011190100
Leakage Analysis Workshop (LAW) server software
P/N 0930126000
Mobile Communications Adapter (MCA) with hard-wired serial data connection
P/N 2011029104
Mobile Communications Adapter (MCA) with hard-wired serial data connection and Wi-Fi option
P/N 2011029105
CT-2 Channel Tagger
P/N 2010670001
CT-3 Channel Tagger
P/N 2010762000
Garmin® GPS receiver
P/N 2071707000
Industrial-grade Wi-Fi access point
P/N 2011222000



Seeker BB-2

Automated Leakage Detection System

- Totally Automatic Operation – No Operator Interaction – for Maximum Efficiency
- Ideal for Drive-Outs, Leak Documentation, and Troubleshooting
- All Vehicle Electronics Housed in Tough Aluminum Enclosure
- Leakage Record Upload via Wi-Fi or Internet to LAW Server
- Very Cost-Effective



Trilithic's Seeker BB-2™ automatic leakage detection system is a fully automated, GPS-based leakage detection system that operates in the background while technicians drive their routes, without any operator interaction. You just install it and forget it.

Housed in a heavy-gauge aluminum enclosure, the Seeker BB-2 can be tucked away into any convenient location in the vehicle – such as under or behind the driver's seat. The system uses a monopole antenna to monitor leaks wherever the vehicle is driven, then stores the data. When the vehicle is parked near a designated Wi-Fi hotspot, the data is automatically uploaded to Trilithic's LAW™ (Leakage Analysis Workshop™) server.

Using the Seeker BB-2, every truck in the operator's fleet contributes useful leakage data, eliminating the need for special drive-out vehicles and personnel. At the end of the workday, the LAW server software analyzes and processes the data from the entire fleet, using a sophisticated algorithm

to calculate the location of each leak to within feet of its source.

Completely automatic, hands-free leak recording

While the technician is driving to a service location or to the office at the start his shift, the Seeker BB-2 automatically monitors leakage strength every second that the vehicle is in motion, labeling each measurement with a time and date stamp, and the leak's GPS location. The driver doesn't need to adjust the unit for different distances from a distribution line, or interact with The Seeker BB-2 in any way. Distance corrections are all handled automatically when the data is processed, rather than by distracting the technician while driving or at work.

Convenient uploading

Normally, the measurement data for a day (or a week) is uploaded to the LAW server using the Seeker BB-2's built-in Wi-Fi adapter. The upload process occurs automatically whenever the unit detects the availability of a designated hot spot (typically the vehicle's parking

lot). Records may also be downloaded to an ordinary USB memory stick, and then uploaded to the LAW server through any USB-equipped PC with an internet connection.

Seamless analysis applications

The LAW server processes all of the collected leakage records – typically every day – analyzing the thousands of measurements that were taken “in the street” to determine the true location of each leak source. It then corrects the measured strength of each leak for distance and generates the alerts, reports, and leakage logs that the operator needs to manage the leakage control program. LAW even prioritizes leakage outbreaks to simplify the process.



Seeker BB-2

Automated Leakage Detection System

SPECIFICATIONS

Frequency Range	Low band: 109.25 to 110.5 MHz High band: 118.5 to 147.25 MHz Settable using the Seeker Setup software, in 6.25 KHz steps
Level Range	2 to 2000 μ V/m
Channel Tag Range	10 Hz to 23 Hz (excluding 16 Hz)
Dimensions (H x W x D)	11" x 8" x 2.15" (280mm x 203mm x 55mm)
Weight	3.10 lbs (1.4 Kg)
Supporting Software	Seeker Setup software for configuring Seeker BB-2 for leakage detection and Wi-Fi uploading of leakage data records to LAW Server software LAW Server software for uploading and processing leakage data records

INCLUDES THE FOLLOWING:

Seeker BB-2 leakage detector
P/N 2011221001

Remote Wi-Fi antenna with 12' coaxial cable and magnetic mount

DC power cable

(2) USB flash drives

User's manual and device drivers on CD

Printed installation guide and installation checklist

Mounting hardware

RELATED PRODUCTS:

APM-2 permanent mount, vertical quarter-wave whip antenna (108 to 118 MHz)
P/N 2010649000

APM-3 permanent mount, vertical quarter-wave whip antenna (119 to 160 MHz)
P/N 2010650000

AVM-2 magnetic base, vertical quarter-wave whip antenna (108 to 118 MHz)
P/N 2010380000

AVM-3 magnetic base, vertical quarter-wave whip antenna (119 to 160 MHz)
P/N 2010379000

Leakage Analysis Workshop (LAW) integrated server package
P/N 2011190100

Leakage Analysis Workshop (LAW) server software
P/N 0930126000

CT-2 channel tagger
P/N 2010670001

CT-3 channel tagger
P/N 2010762000

Garmin® GPS receiver
P/N 2071707000

Industrial-grade Wi-Fi access point
P/N 2011222000

Seeker Lite²

Leakage Detector

- Numerical Measurement Display
- Sensitive, Stable Measurements
- Directional Antenna that Helps Locate Leaks
- Multi-Channel Operation
- Long Battery Life



The Seeker Lite²™ is a tough, convenient, and flexible leakage test tool. It assists in subscriber installations by verifying that the leakage within the house is not great enough to contribute to the cable system's cumulative leakage index (CLI). Leaks can also be important indicators of ingress that can hinder communication on the return band. The Seeker Lite² can also be used to find leaks during troubleshooting.

The Seeker Lite² works by measuring ambient RF leakage in and around a subscriber's premises and can be used to identify and locate all RF leaks greater than 10 µV/m.

Easy Frequency Configuration

Trilithic's Seeker Setup™ software simplifies the process and makes configuring multiple units quicker and easier. Instead of returning your Seeker Lites to the factory to make hardware modifications, you can use Seeker Setup to adjust frequencies.

Multiple Frequency Presets

The Seeker Lite² can be set up to operate on as many as 10 different frequency presets, making it easier to monitor and maintain multiple cable systems. These presets define the

leakage monitoring frequency and, if desired, the tag detection frequency as well. You have the option of setting up only one frequency preset for simple operation, or multiple leakage frequencies for maintaining multiple cable systems. Frequency settings range from 118.5 to 147.25 MHz and can be entered in .00625 MHz (6.25 kHz increments).

Superior Antenna

An improved antenna design provides more directionality than what is typically available from other leakage meters.

Channel Tag Compatibility

Compatibility with Trilithic's CT-2™ and CT-3™ channel tag devices is another feature of the Seeker Lite. Channel tagging refers to the process of adding frequency tags to a broadcast channel signal. The Seeker Lite² can be set up to detect a tagged leak and to ignore leaks that are not tagged. This feature helps you avoid chasing false alarms from signals originating outside of your system.

GT Noise Discrimination

For systems employing digital set-top terminals that cannot tolerate "tagged" leakage carriers, the Seeker Lite² has enhanced "false alarm" resistance. The

Seeker Lite² analyzes the detected RF energy and automatically rejects all noise and signals that are not caused by leaks from your system.

Squelch Operation

Squelch level is the RF signal threshold that the Seeker Lite² uses to determine the validity of a detected signal. The signal "breaks squelch" when the RF leakage is greater than the squelch level, as long as any enabled tag or GT noise qualifiers are met as well. The receiver will not alarm for signals below the squelch level. The squelch level has a factory default of 20 µV/m, however it can be reconfigured using Seeker Setup software.



Seeker Lite²

Leakage Detector

Source Localization

The Seeker Lite² emits an audible tone to help you pinpoint the leakage source. Point the Seeker Lite² in various directions and listen to the pitch of the tone being emitted. Move in the direction from where the pitch is the highest. The closer you move toward the leak, the higher-pitched the tone will become.

SEEKER LITE MODES

Measurement Mode

Measurement mode is used to accurately determine the strength of a leak, pinpoint its location, and provide a leakage value for documentation. Measured RF leakage values can range from 10 to 2000 $\mu\text{V}/\text{m}$ and are displayed in large, easy-to-read numbers. A bar graph at the bottom of the display illuminates proportionally to the strength of the leak. Additionally, an audible tone will sound if the measured signal breaks squelch.

The signal breaks squelch when the RF leakage is greater than the squelch level, as long as any enabled tag or GT noise discrimination qualifiers are also met. This tone can be used to help locate the leak source.

Cruise Mode

The LED on the top of the Seeker Lite² will slowly blink to show the meter is operating in cruise mode. In contrast to the continuous monitoring done during measurement mode, cruise mode monitoring is done in cycles. The Seeker Lite² “sleeps” for a short period of time, wakes up, then takes a measurement. An alarm will sound if the measured signal breaks squelch. If the technician wants to investigate the alarm, he switches the meter to measurement mode. Less battery power is used during cruise mode than measurement mode.

INCLUDES THE FOLLOWING:

118.5 to 147.25 MHz leakage detector
P/N 2011002001

Battery charger
P/N 0610169003

CC-22 carrying case with holster
P/N 2131142000

User's manual on CD

OPTIONAL ACCESSORIES:

CL-8 vehicle power adapter
P/N 0610169005

I/O-17 data cable
P/N 2071585003

RELATED PRODUCTS:

Seeker Setup software
P/N 0930109002

CT-2 channel tagger
P/N 2010670001

CT-3 channel tagger
P/N 2010762000

SPECIFICATIONS

Frequency Range	118.5 to 147.25 MHz Settable using the Seeker Setup software, in 6.25 KHz steps Default frequency settings: 121.2625 MHz 127.2625 MHz 133.2625 MHz 139.2500 MHz 146.2625 MHz
Frequency Setting Range	Up to 10 operating frequencies, selectable by tabbing Selections loaded into detector using Seeker Setup software
Level Range	10 to 2000 $\mu\text{V}/\text{m}$ Can freeze current numeric reading
Numerical Display	Readout of any detected leakage within the sensitivity range
Audible Tone	Tone is present if leakage amplitude exceeds squelch setting Pitch is proportional to strength of leak

CT-2/CT-3

Head-End Channel Tagger

- The Solution to “False Alarms”
- Warbling Identifier Tone
- Discriminating Receiver
- Extended Sensitivity
- Non-Interfering



When several cable systems operate in the same area, it is often difficult to determine which system is the source of a leak. The CT-2™ and CT-3™ solve this problem by tagging the system video carrier (or the carrier provided by the CT-3) with low-frequency modulation. Used as a system with Trilithic's leakage receivers, the CT-2 and CT-3 eliminate all “false alarm” triggers and increase leak detection sensitivity by four times over previous models.

Warbling Identifier Tone

All hand-held Trilithic leakage receivers generate an audible tone that varies in pitch with leak strength. A leak that has been tagged by the CT-2 or CT-3 causes the audible tone to “warble,” rising and falling in pitch at the rate of three oscillations per second. If the distinctive warbling sound is not detected, the operator can be sure that the leak did not originate in his system.

Discriminating Receiver

Trilithic's family of leakage detectors – the Super Plus™, Seeker™, Seeker Lite™, and Seeker BB-2™ – all contain special circuitry that is sensitive only to the tagged signal from the CT-2 or CT-3 and rejects any signals that do not contain it. With the tag function

switched on, Trilithic's leakage detectors are immune to false alarming. Trilithic's channel tag-compatible leakage detectors include unique circuitry which prevents the detector from alarming unless a tagged signal is present.

Easy-to-Install

The CT-2 is very simple to install and can be used with any modulator or signal processor model. Simply insert the CT in the line between the processor and the head-end combiner.



CT-2/CT-3

Head-End Channel Tagger

SPECIFICATIONS

CT-2

Compatibility	Compatible with Trilithic's Super Plus, Seeker, Seeker Lite leakage receivers
Modulation	Sine wave
Modulation Rate	Selectable 3 Hz or 20 Hz (other frequencies available as an option)
Depth of Modulation	3 Hz: settable, 0.5 to 5 dB 10 to 20 Hz: fixed at 3 dB
Input/Output Impedance	75 Ω (nominal)
Power	115 VAC, 230 VAC or DC with 100 to 240 VAC charger (set up at the factory)
Mechanical	1U (1.75") rack enclosure

CT-3

Compatibility	Compatible with Trilithic's Super Plus, Seeker, Seeker Lite leakage receivers
Modulation	Sine wave
Modulation Rate	Selectable 3 Hz or 20 Hz (other frequencies available as an option)
Depth of Modulation	3 Hz: settable, 0.5 to 5 dB 10 to 20 Hz: fixed at 3 dB
Input/Output Impedance	75 Ω (nominal)
Carrier Frequency	Specify single frequency between 107 and 157.25 MHz, crystal-controlled
Carrier Output	47 to 60 dBmV
Spurious	-60 dBc
Power	115 VAC, 230 VAC or DC with 100 to 240 VAC charger (set up at the factory)
Mechanical Packaging	1U (1.75") rack enclosure

INCLUDES THE FOLLOWING:

CT-2 Channel Tagger
P/N 2010670001

CT-3 Channel Tagger
P/N 2010762000

LAW Server

Leakage Analysis Workshop

- Automated Data Collection, Leak Mapping, and Work Order Management for Improved Productivity and Efficiency
- Continuously Updated Database and Map for Analysis and Decision Making
- Automated Leak Location and Amplitude Notation to Find and Prioritize Leaks Faster
- Process Automation for Easier FCC Compliance and Improved Network Integrity



In today's competitive broadband industry, maintaining network performance for return path services is critical for success. Minimizing labor costs to mitigate ingress and ensure system integrity, though, can be a formidable challenge.

By automating the leakage management process, Trilithic's Seeker GPS™ leakage management system and integrated LAW™ Server provide a unique way to minimize maintenance costs and maximize efficiency.

The integrated solution enables system operators to find and fix leaks quickly, minimize technicians' time, quickly assess network leakage integrity, and gauge the effectiveness of leakage maintenance efforts.

Automated Leakage Management

The system consists of the LAW Server software, vehicle-mounted Seeker leakage meters, GPS receivers, and mobile communications adapters (MCAs), which collect leakage location and level information without

interrupting the driver's routine.

When technicians are done for the day, they can manually upload the data or just park in a designated Wi-Fi hotspot and the leakage location data is automatically uploaded to the LAW Server. The server plots the data and marks the leakage source locations as push pins on a map - all automatically.

Then the LAW server automatically assigns and e-mails the repair work orders to the responsible technicians; they upload the pre-and post-repair snapshots; the server closes out the work orders, and the push pins disappear from the map (a patent-pending algorithm automatically corrects logged leaks to reflect the FCC-prescribed equivalent 10-foot measurement).

The system is also scalable, enabling operators to increase the level of automation as the deployment of field equipment reaches an appropriate coverage of the system geography.

By making virtually the entire leakage management process automatic, the Seeker GPS system and LAW Server give cable operators a cost-effective solution for maintaining mission-critical network services, simplifying FCC compliance, reducing maintenance costs, and improving technician productivity.

Hosted Services

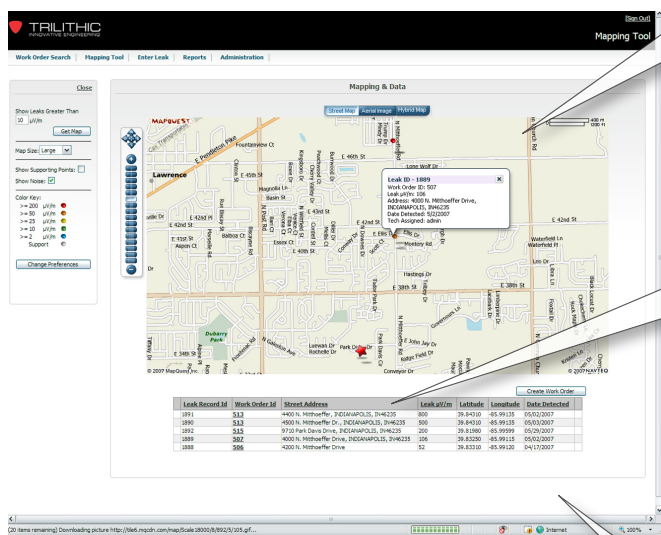
Offered as an alternative to installing and maintaining expensive server equipment and relying on IT personnel focused on other tasks, Hosted Services from Trilithic's Network Services group hosts all of the required hardware, software, security, and hardware support. This turn-key solution allows you to build and operate a high-quality leakage control system at a lower total cost.

LAW Server

Leakage Analysis Workshop

Familiar, intuitive interface allows user to mouse-over leaks (displayed as push-pins) to display additional data. Clicking on the push-pin will display complete details for the selected leak.

Efficient data management is accomplished through the data list, which is displayed in a sortable table format. From this table, the supervisor can select specific leaks and create work orders, while the plant manager can sort leaks by field strength in an associated table on the map page, and assign work orders logistically.



Versatile Map Interface

Sortable Leak List

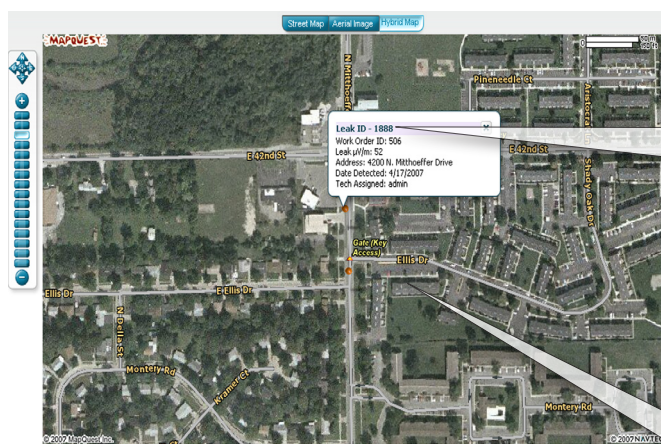
Leak Record Id	Work Order Id	Street Address	Leak $\mu V/m$	Latitude	Longitude	Date Detected
1891	513	4401 N. Hitchcoff Dr., INDIANAPOLIS, IN 46225	800	39.84130	-85.99135	15/02/2007
1892	513	4200 N. Hitchcoff Dr., INDIANAPOLIS, IN 46225	500	39.84130	-85.99135	15/02/2007
1893	513	5727 Park Drive Drive, INDIANAPOLIS, IN 46225	200	39.83980	-85.99399	15/02/2007
1894	502	4200 N. Hitchcoff Drive, INDIANAPOLIS, IN 46225	144	39.83280	-85.99115	15/02/2007
1895	506	4200 N. Hitchcoff Drive	52	39.83280	-85.99130	14/12/2007

Simple Work Order Generation

- Versatile map interface
- Sortable leak list
- Simple work order generation

The hybrid aerial/map option simplifies the correlation of leak information to the physical address, all through a familiar user interface. This helps technicians efficiently and quickly repair leaks.

In addition to automatically creating and assigning work orders by severity and location, the system can e-mail them to specific technicians with a Garmin™ POI (point of interest) file that the technician can use with a mobile Garmin navigator for turn-by-turn directions to the leak location. After the technician indicates that the leak has been repaired, the LAW Server closes out the work orders and removes the push-pins from the map. This automated process reduces the time to repair leaks and ultimately saves you money.



Additional Location Information

Gate Key Access

- Additional location information
- Gate key access

Software Server and Support Options

Trilithic offers a variety of options for implementing the LAW server. You can choose from software-only licenses (recommended for skilled IT professionals only), or pre-configured servers of various sizes, integrating powerful software and hardware. Configured servers provide a complete, managed, comprehensive solution that allows you to focus on building business – not network infrastructure – saving you time and money in up-front costs and ongoing hardware support.

Choose from the following options:

- LAW software by itself
- LAW System Server
- LAW Area Server
- LAW Hosted Services

LAW SERVER HARDWARE SPECIFICATIONS

Trilithic recommends that a user-sourced LAW server meet the following specifications. Operating LAW on a server that does not meet or exceed these requirements may result in problems with the LAW Server application.

LAW System Server Specifications

Processor	Quad Core Xeon® E5440 processor, 2 x 6 MB cache, 2.83 GHz, 1333 MHz FSB
Memory	4 GB, 667 MHz (4 x 1 GB), dual-ranked fully-buffered DIMMs
Hard Drive	4 x 250 GB, 7200 RPM, SATA 3 Gbps, 3.5 inch, hot-plug hard drive (RAID 5)
Operating System	Windows Server 2003® R2 Standard Edition, with SP2 (40 GB OS partition)
Server Software	Microsoft SQL® Server 2005, Workgroup Edition
Network Adapter	Gigabit Ethernet NIC

LAW Area Server Specifications

Processor	Quad Core Xeon® E5440 processor, 2 x 6 MB cache, 2.83 GHz, 1333 MHz FSB
Memory	4 GB, 667 MHz (4 x 1 GB), dual-ranked fully-buffered DIMMs
Hard Drive	4 x 1 TB, 7200 RPM, SATA 3 Gbps, 3.5 inch, hot-plug hard drive (RAID 5)
Operating System	Windows Server 2003® R2 Standard Edition with SP2 (40 GB OS partition)
Server Software	Microsoft SQL® Server 2005, Workgroup Edition
Network Adapter	Gigabit Ethernet NIC

LAW Server

Leakage Analysis Workshop

Wi-Fi ACCESS REQUIREMENTS FOR LAW

A wireless access point communicating with the Wi-Fi option of the vehicle-mounted Seeker MCA module must meet these specifications:

Wi-Fi Requirements

Security	Must support WPA-PSK (TKIP) or up to 128 bit WEP
Wireless Radio	Must support 802.11b connections Support for 802.11a is preferred for future upgrades

INCLUDES THE FOLLOWING:

LAW Server software

P/N 0930126000, or

LAW Integrated Server Package

P/N 2011190100

RELATED ITEMS:

LAW subscription renewal

P/N 0930126001