

# VIAVI Seeker and MCA III

## ANALOG LEAKAGE MANAGEMENT SYSTEM

Seeker with MCA III is a GPS-based leakage management and CATV leak detection system for documentation and troubleshooting.

Powerful, flexible, convenient and very cost-effective — the Seeker GPS with MCA III System from Trilithic sets an entirely new standard for GPS leakage management.

- High-performance, GPS-based leakage management system; ideal for drive-outs, leak documentation and troubleshooting
- Very cost-effective deployment throughout entire fleet
- Maximum efficiency achievable through totally automatic operation
- Leakage record upload via Cellular, WiFi, Ethernet, or USB
- Seeker easily removed from mobile mount for find & fix
- Real-time leakage detection using EDN

Trilithic's Seeker with MCA III leakage management system offers high-performance GPS leakage detection and documentation at a competitive price. No investment for special driveout vehicles is required, and every truck in the operator's fleet can identify leakage outbreaks with GPS precision.

#### Automatic Leak Recording

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.

#### **Early Detection Notifications**

When a set threshold level within the Seeker has been surpassed, Trilithic's Leakage Analysis Workshop™(LAW) will email an EDN (Early Detection Notification) to insure that large leaks will be identified immediately. This automatic process helps keep the technician from being distracted while driving or working. Detecting and finding locations of EDNs is enhanced by hardware quadrangulation which is only available in the MCA III.

#### **Convenient Uploading**

Uploading data records to a server can be fully automated, occurring whenever the vehicle enters a home location or via an operator-controlled Wi-Fi hotspot.

#### **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. If the vehicle is already equipped with a fleet management system using a GPS receiver, in many cases the Seeker GPS system can make use of it.

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#### **Next Generation Mobile Support**

The Seeker MCA III offers high-performance GPS location recording and documentation when monitoring only the aeronautical bands with existing Seeker leakage detectors or monitoring both the aeronautical and LTE bands with the new Seeker D leakage detector. This device also allows you to daisy chain the mobile mounts of the Seeker and Seeker D units together in order to log data from multiple units mounted in the same vehicle.





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Uploading data records to a server can be fully automated, occurring whenever the vehicle enters a base location, via an operator-controlled Wi-Fi hotspot.

## **SEEKER SPECIFICATIONS**

LEAKAGE DETECTOR		
Frequency Range	Low band: 109.25 to 110.5 MHz High band: 118.5 to 147.25 MHz Can be adjusted in 6.25 KHz steps using the configuration methods listed below	
Frequency Settings	10 user-adjustable operating frequencies, selectable on front panel Set using the configuration methods listed below	
Calibrated Level Range	2 to 2000 μV/m Can freeze current numeric reading	
Level Accuracy	±2.0 dB	
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 installed in hub or head-end	
Data Connection	USB connection to local PC running LAW upload client Internet or LAN connection from LAW upload client to LAW Server	
Power	Internal battery with eight hours of operation per charge OR Vehicle power of 12 VDC while in Mobile Mount	
Configuration Method	Connection from Leakage Detector to local PC running Seeker Setup Software	
SEEKER MCA III		
Ethernet Communications	10/100 RJ45 connection to fleet management systemss	
WiFi Communications	Type: WiFi (802.11 a/b/g/n) to operator-controlled and configured hot-spot Security: WPA-PSK (TKIP), WEP (128-bit) or WPA2-PSK (AES)	
Cellular Communications	Optional GSM/GPRS cellular connection to operator-provided cellular carrier	
Early Detection Notification (EDN)	Email notification of threshold exceeding leaks	

## ORDERING INFORMATION

AVAILABLE SEEKER MODELS	PART NUMBER
Seeker Leakage Detector without Mobile Mount	TRI-LKG-SEEKER-METER
Seeker D Leakage Detector with Mobile Mount	TRI-LKG-SKR-D-W-MOUNT
AVAILABLE SEEKER MCA III MODELS	PART NUMBER
Seeker MCA III with WiFi	TRI-LKG-SEEKER-MCA-WIFI
CHANNEL TAGGERS	PART NUMBER
CT-4 Channel Tagger	TRI-LKG-CT4
AVAILABLE SOFTWARE	PART NUMBER
Seeker Setup Configuration Software	TRI-LKG-SW-SEEKER-PC
Analog Measurement LAW Integrated Server Package	TRI-LKG-LAW-SERVER-W-SW
LOW BAND ANTENNAS	PART NUMBER
AFS-2 dipole antenna (138 MHz) (Specify leakage frequency when ordering)	TRI-LKG-AFS-2-LONG
AVM-3 magnetic base, vertical quarterwave whip antenna (138 MHz) (Specify leakage frequency when ordering)	TRI-LKG-AVM-3



WIFI AND ACCESSORIES	PART NUMBER
Garmin® GPS receiver for Seeker MCA II and Seeker	MCA III TRI-LKG-GPS-MCA
MISCELLANEOUS ACCESSORIES	PART NUMBER
CC-28 padded holster	TRI-LKG-SEEKER-D-HOLSTER
CL-9 vehicle power adapter	TRI-ACCY-USBPWR-VEH-WCBL
Shielded ethernet cable (10ft)	TRI-ACCY-CAT5-10FT-QUAD
Seeker MCA III to Mobile Mount Power and Data Cable	TRI-LKG-SKR-MCA-PWR-CBL
2.4 and 5 GHz WiFi antenna	TRI-LKG-MCAIII-WIFI-ANT