

- The Complete High Performance, Easy-to-use Leakage Solution
- Adjustable Frequencies
- Accurately Monitors Leakage in All Digital Systems or Mixed Digital and Analog Systems
- Time-Saving Channel Tagging Capabilities
- Latest Leak Tagging Technology
- Unsurpassed Sensitivity from 2  $\mu\text{V}/\text{m}$  to 2000  $\mu\text{V}/\text{m}$
- Cost Effective Solution Utilizing the Majority of Existing Seeker GPS Installation and Equipment



### Ideal for drive-outs, leak documentation, and troubleshooting

#### Overview

Trilithic's new Seeker D™ leakage detector teamed up with Trilithic's analog leakage platform provides the complete leakage solution.

Trilithic's new leakage detector and tagger accurately detects and measures signal leakage within the LTE (frequency range of 610.5 to 615 MHz) and aeronautical bands (frequency range of 135 to 139 MHz).

The Seeker D (Meter/Receiver) functions with the new CT-4™ head end 1U rack mounted unit (Tagger/Transmitter) to provide an uncompromised tagging solution for active analog or digital systems. This feature detects tagged leaks and ignores untagged leaks, saving time from false alarms from signals not originating in your system.

The CT-4 can act as a traditional CT-2™ or CT-3™, and can insert Trilithic's proprietary tagged signals in both the aeronautical range and the LTE range at the same time. The CT-4 eliminates the risk of affecting any adjacent digital channels by injecting an adjustable signal from 10 to 30 dBmV, targeting approximately 30 dB below the chosen digital carriers.

Featuring a new mobile mount, the Seeker D has a wide sensitivity range (2 to 2000  $\mu\text{V}/\text{m}$ ). In the NAV band, the Seeker D detects the proprietary signal from the CT-4 and scales them to be similar to leakage readings taken from an analog carrier. Consequently, readings taken from the Seeker meter and Seeker D meter produce similar results in the aeronautical band.

This digital leakage system allows the existing LAW (Leakage Analysis Workshop), Garmin GPS receiver, Wi-Fi antenna, cellular antenna, and the MCA or MCA II to be utilized while keeping your plant technologically ready to meet tomorrow's leakage monitoring needs. Seeker D can also be combined with an existing Seeker GPS system.

Whether testing for leaks in both digital and analog systems, or monitoring aeronautical bands or LTE, Seeker D provides all of the capability to find and fix leaks quickly, accurately, and effectively.

**innovative technology to keep you a *step ahead***

**SEEKER D SPECIFICATIONS**

<b>Frequency Range</b>	<b>Low band:</b> 135–139 MHz <b>High band:</b> 610.5–615 MHz Adjustable in 12.5 kHz Steps via Seeker Setup Software
<b>Frequency Settings</b>	10 user-adjustable operating frequencies, selectable on front panel Set using the configuration methods listed below
<b>Receiver Sensitivity</b>	-115 dBmV
<b>Calibrated Level Range</b>	<b>Low band:</b> 2 to 2000 $\mu$ V/m scaled to match an analog carrier with an AFS-2/4 Handheld Dipole or AVM-3 Vehicle Mounted Whip Antenna  <b>High band:</b> 2 to 2000 $\mu$ V/m scaled to match an analog carrier with an AFS-7 Handheld Yagi antenna OR 4 to 2000 $\mu$ V/m scaled to match an analog carrier with an AVM-4 Vehicle Mounted Colinear Array Antenna
<b>Level Accuracy</b>	$\pm$ 2.0 dB
<b>Leakage Sampling</b>	Dynamic Auto-Sensing & Adjusting
<b>Numerical Display</b>	Readout of any detected leakage within sensitivity range
<b>Audible Tone</b>	Tone is present if leakage amplitude exceeds squelch setting and digital tag is detected Pitch is proportional to strength of leak
<b>Automatic Noise and Overbuild Discrimination</b>	Internal circuitry discriminates between leaks and noise Overbuild discrimination provided by CT-4 channel tagger installed in hub or head-end
<b>Power</b>	Internal battery with eight hours of operation per charge OR Vehicle power of 12 VDC while in Mobile Mount
<b>Configuration Method</b>	USB connection from Leakage Detector to local PC running Seeker Setup Software OR Ethernet or Wi-Fi connection from Seeker MCA III to the LAW Server while the Leakage Detector is located in the Mobile Mount

**SEEKER MCA III SPECIFICATIONS (OPTIONAL)**

<b>Standard Communications Interfaces</b>	10/100 RJ45 connection to fleet management systems Wi-Fi (802.11 a/b/g/n) to operator-controlled and configured hot-spot
<b>Early Detection Notification (EDN)</b>	Email notification of threshold exceeding leaks

**SEEKER D INCLUDES:**

Seeker D leakage detector  
**P/N 2011655001**

Low Band Rubber Duck Antenna  
High Band Rubber Duck Antenna  
Seeker D Mobile Mount  
Mobile Mount Power Cable  
AC Travel Charger & USB Cable  
Printed Quick Start Installation Checklist  
& Guide  
Operation Manual on CD

**OPTIONAL SEEKER MCA III:**

MCA III  
**P/N 201169000**

Seeker MCA III to Mobile Mount Power  
and Data Cable  
2.4 & 5 GHz Wi-Fi antenna  
Shielded ethernet cable (10ft)

**DIGITAL CHANNEL TAGGER:**

CT-4 Channel Tagger  
**P/N 2011632000**

**AVAILABLE SOFTWARE:**

Seeker Setup Configuration Software  
**P/N 0930109002**

LAW Integrated Server Package  
**P/N 2011190200**

LAW SaaS Subscription  
**P/N 9980002000**

**LOW BAND ANTENNAS:**

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**

**HIGH BAND ANTENNAS:**

AFS-7 YAGI antenna  
**P/N 2011644000**

AVM-4 magnetic base, colinear array  
antenna (119 to 160 MHz)  
**P/N 2011645000**

APM-4 permanent mount, colinear array  
antenna (119 to 160 MHz)  
**P/N 2011646000**

**OPTIONAL ACCESSORIES:**

Garmin® GPS receiver for Seeker MCA II  
& Seeker MCA III  
**P/N 2071707004**

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

CL-9 vehicle power adapter  
**P/N 0610169007**

Garmin FMI Cable (FMI-40)  
**P/N 2071585025**

Garmin FMI Cable (FMI-40 Euro)  
**P/N 2071585027**

Garmin FMI Cable (FMI-15)  
**P/N 2071585026**

Seeker MCA II or MCA III to Wireless  
Matrix or SageQuest Data Cable  
**P/N 2071585030**

**REPLACEMENT PARTS:**

Shielded ethernet cable (10ft)  
**P/N 2072213010**

Seeker MCA III to Mobile Mount Power  
and Data Cable  
**P/N 2071585029**

2.4 & 5 GHz Wi-Fi antenna  
**P/N 2071677004**