

# Searcher Plus Family

## Leakage Detectors

- Testing Installations for Excessive Leakage
- Walking Down the Leakage Source
- Near-Field Preventative Maintenance Measurements

## Overview

XFTP by Trilithic brings you the Searcher Plus™ series leakage detectors that have been the standard of the cable industry for more than 20 years. Today, over 20,000 of these instruments are in daily use by cable systems all over the world to control system leakage, perform government-mandated proof-of-performance tests, and to identify the small leaks in a systems that may warn of ingress problems. All Searcher Plus series detectors are shipped ready to perform the full range of leakage control applications.

### HAND HELD AND VEHICLE USE

These leakage detectors are ideal for CLI measurements using the optional AFS series calibrated dipole antenna. When tracking down a leak source on foot, the operator may use the provided flexible rubber antenna or the standard near-field probe for close-in inspection and fault diagnosis. An optional lockable vehicle mount, connections to vehicle power, and a whip antenna configure the Searcher series detectors for convenient drive-out operation.



### SUPER PLUS

The Super Plus™ leakage detector is designed for the new era of digital program services and overbuilt systems. Its high immunity to “false alarms” from other signal sources (including leaks from other systems) make the Super Plus the perfect instrument for identifying leaks in noisy or overbuilt areas. Because the Super Plus only responds to carriers that have been “tagged” by a CT-2™ channel tagger, or CT-3™ tagged carrier inserter, it rejects the effects of ignition noise, power line interference, and signals which do not originate in the tagged system.

### SEARCHER PLUS GT

The Searcher Plus GT™ is the first leakage measurement receiver built specifically for systems employing digital set top terminals that cannot tolerate “tagged” leakage carriers. The Searcher Plus GT provides enhanced false alarm resistance and many of the features of the Super Plus without the use of a tagged leakage test signal.

# Searcher Plus Family Leakage Detectors

## Specifications

SUPER PLUS	SEARCHER PLUS GT
<b>Frequency (MHz):</b> 121.2625 - P/N 2011235121 127.2625 - P/N 2011235127 133.2625 - P/N 2011235133 139.2500 - P/N 2011235139 Custom - P/N 2011235099	<b>Frequency (MHz):</b> 121.2625 - P/N 2011233121 127.2625 - P/N 2011233127 133.2625 - P/N 2011233133 139.2500 - P/N 2011233139 Custom - P/N 2011233099
<b>Selectivity:</b> Typical 6 KHz at -3 dB	<b>Selectivity:</b> Typical 6 KHz at -3 dB
<b>Input Sensitivity:</b> <0.5 $\mu\text{V}/\text{m}$ in SUPER mode, used with CT-2 or CT-3 channel tagger 2 $\mu\text{V}/\text{m}$ in x1 mode 20 $\mu\text{V}/\text{m}$ in x10 mode	<b>Input Sensitivity:</b> 2 $\mu\text{V}/\text{m}$ in x1 mode 20 $\mu\text{V}/\text{m}$ in x10 mode
<b>Measurement Accuracy:</b> $\pm 1.5$ dB @ 25° C (77° F) $\pm 3.0$ dB @ -18° to +49° C (0° to 120° F)	<b>Measurement Accuracy:</b> $\pm 1.5$ dB @ 25° C (77° F) $\pm 3.0$ dB @ -18° to +49° C (0° to 120° F)
<b>Alarm Indication:</b> Audio tone with pitch proportional to meter deflection.	<b>Alarm Indication:</b> Audio tone with pitch proportional to meter deflection.
<b>Meter Functions:</b> 2 to 2,000 $\mu\text{V}/\text{m}$ , normal amplitude tracking. When detector is set to HOLD mode, the peak reading is held for 5 seconds before auto-reset.	<b>Meter Functions:</b> 2 to 2,000 $\mu\text{V}/\text{m}$ , normal amplitude tracking. When detector is set to HOLD mode, the peak reading is held for 5 seconds before auto-reset.
<b>Power:</b> Rechargeable NiMH battery; internal charger operates on 13.8 VDC vehicle power.	<b>Power:</b> Rechargeable NiMH battery; internal charger operates on 13.8 VDC vehicle power.
<b>Weight:</b> 1.00 lb (454 g)	<b>Weight:</b> 1.00 lb (454 g)
<b>Dimensions (H x W x D):</b> 1.75" x 3.25" x 6.0" (44mm x 83mm x 152mm)	<b>Dimensions (H x W x D):</b> 1.75" x 3.25" x 6.0" (44mm x 83mm x 152mm)

### INCLUDES THE FOLLOWING:

Calibrated leakage detector  
 Nickel-metal hydride battery  
 NFP-1 passive 50  $\Omega$  near-field probe (Super Plus Only)  
 Rubber duck antenna  
 Battery charger  
 User's manual

### FACTORY-SET CUSTOM FREQUENCIES:

Super Plus with custom frequency  
 P/N 2011235099  
 Searcher Plus GT with custom frequency  
 P/N 2011233099

### RELATED PRODUCTS:

AFS-2 dipole antenna  
 P/N 2010436000  
 APM-2 permanent mount vehicle antenna  
 P/N 2010649000  
 APM-3 permanent mount vehicle antenna  
 P/N 2010650000  
 AVM-2 magnetic mount vehicle antenna  
 P/N 2010380000  
 AVM-3 magnetic mount vehicle antenna  
 P/N 2010379000  
 SMB-1 Searcher Plus family mobile mount kit  
 P/N 2070411001

### RELATED EQUIPMENT:

When several cable systems operate in the same area, it is often difficult to determine which system is the source of a detected leak. Trilithic's Channel Tag inserters solve this problem by imposing a low frequency amplitude modulation onto the system video carrier used for leakage testing. The modulation is undetectable by TV receivers and non-baseband converters, but is detectable by the Super Plus.

CT-2 modulates one of the standard video carriers in the system's midband channel lineup.

CT-3 generates a tagged carrier at a customer-specified frequency. The CT-3 is to be used when a suitable video channel is not available.

Either CT model occupies 1U (1.75") of rack space.