

# CPAT<sup>®</sup> DRV1

## // Vehicle-based Analog Leakage Detection Module

The DRV1 is an analog signal leakage detection receiver that is part of the CPAT FLEX system. Combined with the ARD4 recording/communication module, it becomes a powerful and fully automated leakage monitoring platform.

- High performance digital RF radio front-end
- Fully agile from 110-135 MHz (Lo-band) and 118-155 MHz (Hi-band)
- Adjustable frequency in 1 kHz increments
- Frequency hopping capability
- Video synch detection used on untagged analog video carriers
- Channel tag compatible (AM or FM)
- No field intervention needed by technicians to operate

### // Frequency Agile

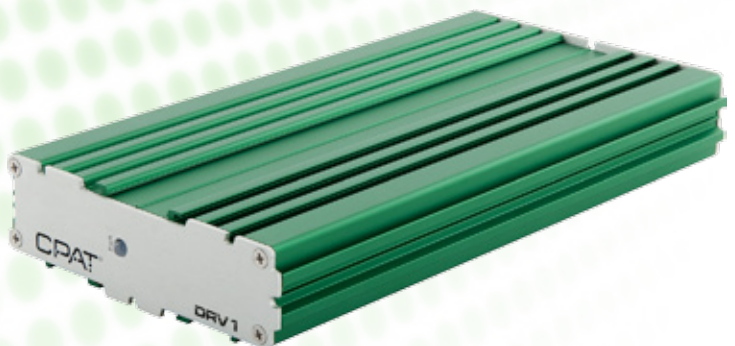
The DRV1 frequency agile digital radio offers full flexibility for selecting your leakage monitoring frequency in 1 kHz tuning increments. The DRV1 frequency can be changed wirelessly without having to remove equipment from the vehicle.

### // Frequency and Tag Hopping

With its unique frequency and tagging hopping capability, the DRV1 can automatically switch to a different leakage configuration as soon as it enters a different system plant. The system's boundaries are loaded into each ARD4 module, which uses GPS coordinates to confirm that the vehicle is entering a different plant and commands the DRV1 to switch to the proper leakage monitoring configuration instantly.

### // Channel Tag Compatible

For operators working with overbuilt systems, the DRV1 module has the ability to detect AM or FM channel tags using tone frequencies varying from 3 to 20 Hz. Using channel tagging also improves the module's ability to properly discriminate the operator's signal leaks from other interfering signal sources, while increasing the sensitivity of the DRV1 module.



### // Hands-off Operation

No user intervention is required to operate the DRV1 module. Leakage events are automatically detected while technicians perform their daily work routine. When a new DRV1 firmware release is available, upgrades are automatically uploaded as soon as the DRV1 module communicates with the CPAT server through the vehicle's wireless communication link.

# // Specifications

## // Electrical

<b>Detector type</b>	Digital receiver/demodulator
<b>Frequency range</b>	Agile 110 to 135 MHz (Lo-band version) Agile 118 to 155 MHz (Hi-band version)
<b>Tuning resolution</b>	1 kHz
<b>Equivalent resolution bandwidth</b>	4 kHz
<b>Level range</b>	2 to 2,000 uV/m
<b>Level accuracy</b>	± 1 dB
<b>Tag detector</b>	AM [3 to 20 Hz] – FM [3 to 20 Hz]
<b>Video detector</b>	Video sync detection [untagged video carriers]
<b>Power</b>	12 VDC, 400 mA
<b>Communication port</b>	Serial port

## // Physical

<b>Dimensions</b>	3.3 cm x 11.2 cm x 22.3 cm / 1.3" x 4.4" x 8.8" [H x W x D]
<b>Weight</b>	652 grams / 23 ounces
<b>Operating temperature</b>	-20° to +60° C / -4° to + 140° F

## // Ordering Information

	P/N
<b>DRV1 – Vehicle-based Leakage Detection Kit Lo-band (110-135MHz)</b>	9950-LK
<b>DRV1 – Vehicle-based Leakage Detection Kit Hi-band (118-155MHz)</b>	9950-HK
<b>Quarter-wave VHF Antenna Kit (leakage monitoring)</b>	6400

## // Related Items

<b>ARD4 – WiFi Autonomous Recording Device Kit</b>	9710-WK
<b>DRV3 – Portable Digital Leakage Detection Meter with (118-140 MHz) / (572-960 MHz) Dual-band Tuner</b>	9930-K
<b>DRV2 – Portable Leakage Detection Meter Lo-band Kit (110-135 MHz)</b>	9850-LK
<b>DRV2 – Portable Leakage Detection Meter Hi-band Kit (118-155 MHz)</b>	9850-HK

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