

# CPAT® DRV3 / DSG1

// Portable Digital Leakage Detector / Digital Signal Generator

The DRV3 is a portable signal leakage detection meter designed to operate in all-digital cable networks. It operates as a portable find-and-fix meter and as a monitoring probe when part of the CPAT FLEX system.

The DSG1 is a dual-band digital signal generator that inserts an ultra-low level digital signal between QAMs, without causing interference or MER degradation.

- High performance find-and-fix leakage meter for all-digital systems
- Fully agile from 118-140 MHz (Mid-band) and from 572-960 MHz (LTE-band)
- Patent pending technology using ultra-low level digital carrier
- No MER/BER impairment to adjacent QAM carriers
- Locates leakage in overbuild cable plants
- Based on our CPAT leakage monitoring system technology

## // Leakage in all-digital networks

The DRV3 is your all-digital leakage monitoring and portable find-and-fix meter. It can detect digital leaks equivalent to 20 uV/m at 3 m in the analog domain (FCC 320, art 76.605). With its dual-tuner design, the DRV3 simultaneously detects leakage in the Mid-Band and in the LTE band.

## // Overbuild networks

The DRV3/DSG1 can be configured to use up to 8 digital tag codes to discriminate between overbuild networks.

## // Easy configuration

Your DRV3 meter can be configured via the front panel buttons. When operating with the ARD4, the DRV3 and DSG1 configurations are set through the CPAT Web application.



Note: Production version may differ from illustration.

## // Scalable solution

The DRV3 can be used in every vehicle as a find-and-fix leakage repair meter or as a leakage monitoring receiver when connected to the ARD4 recording device.

Using the ARD4/DRV3 package as a leakage monitoring/repair system gives you a flexible, cost-effective solution for your cable leakage control program of your all-digital networks.

# // Specifications (preliminary)

## // DRV3

### // Electrical

<b>Detector type</b>	Dual-band digital receiver/demodulator
<b>Frequency range</b>	Agile from 118 to 140 MHz (Mid-band) Agile from 572 to 960 MHz (LTE band)
<b>Channel tuning</b>	Configurable via USB port and by front panel buttons
<b>Tuning resolution</b>	10 kHz
<b>Digital signal bandwidth</b>	700 kHz
<b>Digital gain</b>	30 dB
<b>Baseband bandwidth</b>	200 Hz
<b>Level range</b>	20 to 2,000 $\mu\text{V}/\text{m}$ @ 3 meters (Mid-band), 20 $\mu\text{V}/\text{m}$ to 2000 $\mu\text{V}/\text{m}$ @ 3 meters (LTE band)
<b>Level accuracy</b>	$\pm 1$ dB
<b>System tag ID</b>	8 code combinations to discriminate overbuild networks
<b>Audible tone</b>	Yes, varies with leak intensity
<b>Adjustable audio volume</b>	Yes, variable
<b>RF level scale display</b>	Single scale from 0 to 2,000 $\mu\text{V}/\text{m}$
<b>Measurement units</b>	$\mu\text{V}/\text{m}$ and dB $\mu\text{V}/\text{m}$
<b>Power</b>	Pack of 2 rechargeable Li-ion cells, 3,100 mAh
<b>Operation time</b>	3.5 hours nominal (both tuners activated) or 6 hours nominal (one tuner activated)
<b>Charging temperature</b>	0° to +60° C / 32° to +140° F
<b>Communication port</b>	USB serial port

### // Physical

<b>Dimensions</b>	22 cm x 9 cm x 4 cm / 9" x 4" x 2" [H x W x D]
<b>Weight</b>	500 grams / 17 ounces

### // Dock station

<b>TBA</b>	
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## // DSG1

### // Electrical

<b>Modulator type</b>	Dual-band digital signal modulator
<b>Frequency range output 1 of 2</b>	Agile from 118 to 140 MHz (Mid-band)
<b>Frequency range output 2 of 2</b>	Agile from 572 to 960 MHz (LTE band)
<b>Tuning resolution</b>	10 kHz
<b>Modulated signal</b>	20 to 50 Hz signal tag
<b>Output level from each RF output</b>	from +10 to 50 dBmV
<b>Status display</b>	Through an LCD on front panel
<b>Communication port</b>	10/100Base-T Ethernet
<b>Setup</b>	Through CPAT interface
<b>Power</b>	120 VAC, 0.5A (15W) fully loaded

### // Physical

<b>Dimensions</b>	Standard 1RU chassis 4.4 cm x 21 cm x 33 cm / 1.75" x 8" x 13" [H x W x D]
<b>Operating temperature</b>	-20° to +60° C / -4° to +140° F

### // Ordering Information

P/N

**DRV3 – Portable Digital Leakage Detection Meter with (118-140 MHz) / (572-960 MHz) Dual-band Tuner** 9930-K  
Includes: DRV3 meter with rubber holster, rubber duck antenna, vehicle docking station, vehicle DC adapter, AC adapter, belt strap and user guide.

### // Options

**Near-field Probe Antenna** 5518

### // Related Items

**VHF/UHF Vehicle Antenna Kit** 6310  
Includes: magnetic base, whip antenna and BNC terminated cable.

**ARD4 – WiFi Autonomous Recording Device Kit** 9710-WK

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