

# 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 and hybrid 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 a 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 low level digital carrier
- No MER/BER impairment to adjacent QAM carriers
- Locates leakage in overbuild cable plants
- Based on our CPAT FLEX leakage monitoring system technology

## // Leakage in all-digital networks

The DRV3 is your all-digital leakage monitoring and portable find-and-fix meter. 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 AM or DSB-SC tag signature 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.



## // 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

## // 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>Frequency stability</b>	Mid-band: $\pm 500$ Hz LTE-band: $\pm 2.5$ kHz
<b>Tuning resolution</b>	100 Hz
<b>Modulated signal</b>	10 to 110 Hz AM tag 3,500 to 7,000 Hz DSB-SC 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

<b>DRV3 – Digital Leakage Receiver Kit</b>	150-00031-752
<b>Includes:</b>	
110-220 VAC to 12 VDC Adaptor	110-00005-001
ARD4/DRV3 USB interconnect cable	036-00020-001
+12 VDC power supply	110-00010-001
Battery pack	008-00002-001
Rubber ducky antenna (118-140 MHz)	111-00022-001
Rubber ducky antenna (698-806 MHz)	111-00035-001
DRV3 – Dock station	150-00032-001
DRV3 – Digital Leakage Receiver	150-00031-001
Uni-flex mount for DRV3 dock station	012-00020-001
DRV3 User Manual	100-00001-001

### // Accessory Options

Vehicle Magnetic-mount antenna BNC (118-140 MHz)	112-00004-100
Vehicle Magnetic-mount antenna SMA (572-960 MHz)	112-00009-100

### // Related Items

ARD4 – WiFi Autonomous Recording Device Kit	150-00020-100
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## // 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>	100 Hz
<b>Level range</b>	2 to 4,000 $\mu$ V/m @ 3 meters (Mid-band), 5 $\mu$ V/m to 4,000 $\mu$ V/m @ 3 meters (LTE-band)
<b>Level accuracy</b>	$\pm 1.5$ dB Mid-Band $\pm 2.5$ dB LTE-Band
<b>System tag</b>	AM modulation 10-110 Hz DSB-SC modulation 3,500 to 7,000 Hz Video NTSC (Mid-band only)
<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 4,000 $\mu$ V/m
<b>Measurement units</b>	$\mu$ V/m and dBuV/m
<b>Power</b>	Pack of 2 rechargeable Li-ion cells, 3,100 mAh
<b>Operation time</b>	2.5 hours nominal (both tuners activated) or 4.0 hours nominal (one tuner activated)
<b>Charging temperature</b>	0° to +45° C / 32° to +113° F
<b>Communication port</b>	USB serial port
<b>Operation temperature</b>	0° to +40° C / 32° to +104° F

### // Physical

<b>Dimensions</b>	21 cm x 11 cm x 4 cm / 8.3" x 4.3" x 1.6" [H x W x D]
<b>Weight</b>	850 g / 30 ounces

### // Dock station

<b>Dimensions</b>	24 cm x 12.5 cm x 8 cm / 9.4" X 4.9" X 3.2" [H x W x D]
<b>Weight</b>	240 g / 9 ounces

\* Specifications subject to change without prior notice.

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