

CPAT[®] DRV3 Lite / DSG1 Lite

// Portable Digital Leakage Detector / Signal Generator

The DRV3 Lite 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 for the installation or service technicians.

The DSG1 Lite is a dual-band signal generator which inserts a high level signal into the drop cable to locate “hard-to-find” leaks.

- High performance find-and-fix leakage meter and signal generator
- Dual-mode leakage detection (system test / pressure test)
- System test detects the 2 DSG1 carriers generated from the Head-end
- Pressure test detects 2 carriers (126 / 612 MHz) generated from the DSG1 Lite
- Real-time RF level display of dual-frequencies in split-screen
- Bluetooth connectivity to third party devices (cellular phone, tablets, etc.)

// Dual-Mode leakage detection

The DRV3 Lite is your all-digital leakage portable find-and-fix meter. The DRV3 Lite can operate in “system mode”, detecting leakage carriers generated from the DSG1 signal generator located at the head-end or operate in “pressure test” mode, detecting high level carriers generated by the portable DSG1 Lite signal generator. The technician can switch from “system” to “pressure” test mode via a single-button press. With its dual-tuner design, the DRV3 Lite provides simultaneous visual and audio indication of detected leaks in the VHF and UHF bands.

// Bluetooth connectivity

The DRV3 Lite can connect to third party devices such as cellular phones, tablets, etc. using a Bluetooth connection. This connectivity is useful for operators documenting detected leakage with GPS position into their cable leakage monitoring system, preventive maintenance or home certification programs.

// DRV3 Lite application

The DRV3 Lite application part of the CPAT Mobile Suite displays simultaneous Mid and LTE band signals’ field strength with real-time histogram. The application will set the proper configuration parameters of the unit via Bluetooth connectivity.



// Certified drop installations

The DRV3/DSG1 Lite package insures total quality in-house installations by tracking potential cable shielding integrity issues. With its “pressure test” mode using high RF level carriers, we are forcing all cable integrity problems to show up and be detected. Performing a pressure test while the fulfillment technician is at the client premises provides an effective and unique opportunity to clear up any present shielding integrity issues before they eventually transform into costly service calls. Using the DRV3/DSG1 Lite package is an additional tool part of an operator’s preventive maintenance tool box.



// Specifications

// DSG1 Lite

// Electrical

Modulator type	Dual-band digital signal modulator
Output type	Single "F" 75 Ohm female connector
Frequency output 1 of 2	Fixed at 126 MHz (Mid-band)
Frequency output 2 of 2	Fixed at 612 MHz (LTE-band)
Frequency stability	±5 kHz
Modulated signal	32 Hz AM tag
Output level from each RF output	High: 50±2 dBmV at 126 MHz / 50±2 dBmV at 612 MHz Low: 30±2 dBmV at 126 MHz / 30±2 dBmV at 612 MHz
Transmission status display	Through an illuminated Power button
Battery charge/status display	Through an LED located below DC connector
Power adapter	+12VDC 1.2A max
Battery	Pack of 2 rechargeable 7.2VDC lithium-ion batteries of 2000 mAh ~0.3A
AC battery charger	Input: 100-240V ~50-60Hz 0.7A Output: +12VDC 1.66A Transient overvoltage II Rated pollution degree 2
Mains supply voltage fluctuations	Up to ±10% of the nominal voltage
Operation time	10 hrs. continuous on battery power
Operating temperature*	-20°C to +40°C (-4°F to +104°C)
Charging temperature*	0°C to 45°C (32°F to 110°C)
Battery charge time	2.25 hrs. for full charge
Storage temperature	-20°C to +45°C (-4°F to +113°C)
Maximum relative humidity	80% for temperatures up to 31°C (88°F) decreasing linearly to 50% relative humidity at 40°C (104°F)

// Physical

Dimensions	4 cm x 12 cm x 13 cm / 1.5" x 4.7" x 5.1" [H x W x D]
Weight	17 oz / 500 g
Recommended use	Indoor use or outdoor use without exposure to direct sunshine or a wet location

// Ordering Information

P/N

DSG1 Lite - Portable Signal Generator	150-00034-001
AC/DC adapter	110-00005-001
DSG1 Lite User Manual	100-00010-001
DRV3 Lite +12 VDC power supply	110-00010-001
DRV3 Lite battery pack	008-00006-001
DRV3 Lite Mid-band rubber duck antenna (SMA connector)	111-00031-001
DRV3 Lite - Portable leakage detection receiver	150-00033-001
DRV3 Lite User Manual	100-00009-001

CPAT DRV3 Lite / DSG1 Lite

// DRV3 Lite

// Electrical

Detector type	Dual-band digital receiver/demodulator
Frequency range	Agile from 118 to 140 MHz (Mid-band) Agile from 600 to 860 MHz (LTE-band)
Channel tuning	Configurable via USB port and/or Bluetooth
Tuning resolution	100 Hz
Level range	2 to 4,000 µV/m @ 3 meters (Mid-band) 5 to 4,000 µV/m @ 3 meters (LTE-band)
Level accuracy	±1.5 dB Mid-band ±2.5 dB LTE-band
System tag	AM modulation 20-110 Hz DSB-SC modulation 3480-7000 Hz Video NTSC (Mid-band only)
Audible tone	Yes, varies with leak intensity. Can be muted
Adjustable audio volume	Yes, variable
RF level scale display	Single scale from 0 to 4,000 µV/m
Measurement units	µV/m and dBuV/m
Communication port	USB serial port and Bluetooth
Power adapter	+12VDC 1.2A max
Battery	Pack of 2 rechargeable 7.2VDC lithium-ion batteries of 2000 mAh ~0.3A
Operation time	6 hrs. continuous on battery power
Operating temperature*	-20°C to +40°C (-4°F to +104°C)
Storage temperature	-20°C to +45°C (-4°F to +113°C)
Charging temperature*	0°C to 45°C (32°F to 110°C)
Maximum relative humidity	80% for temperatures up to 31°C (88°F) decreasing linearly to 50% relative humidity at 40°C (104°F)
Battery charge time	2.25 hrs. for full charge

// Physical

Dimensions	17 cm x 8 cm x 4 cm / 6.7" x 3.1" x 1.6" [H x W x D], without the mid-band antenna
Weight	16 oz / 450 g

* Specifications subject to change without prior notice.

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