



## Product

The DrugDetect–F1 Drug Detector is a handheld, battery-operated non-contact optical scanner for detecting all forms of visible and detectable amounts of fentanyl, methamphetamine, and pseudoephedrine in powder or crystalline form, in transparent plastic wrap or bags. DrugDetect-F1 is calibrated for use by Law Enforcement Organizations (LEO), where potentially prosecutable amounts are indicated [ $>1.0\%$ ] with a red light and specific “beep” sound, and trace amounts within 1/10th of this amount produce a yellow light.



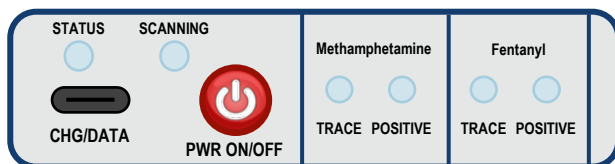
## Principles Of Operation

Photoemission from an optically excited surface is used to detect minute quantities of fentanyl, methamphetamine, and pseudoephedrine. This patented device uses an energy source within the instrument to provide optical excitation at the appropriate wavelength and the DrugDetect-F1’s detector senses the resulting photoemission.

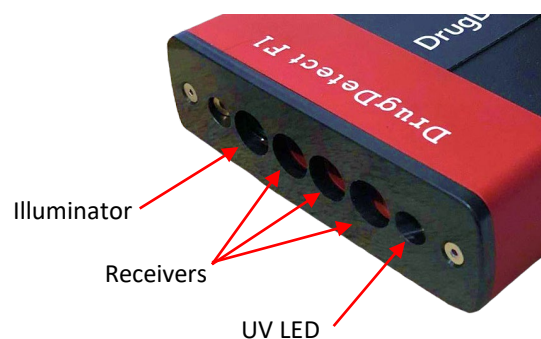
## Product Features & Benefits

- Handheld, Lightweight, Ergonomic Design
- Improves Safety and Efficiency for Law Enforcement When Conducting Searches & In Field Drug Testing
- Near Instant Results
- Non-Contact Detection With Surface Illumination
- Detects Through Transparent Plastic Wrap/Bags
- Easy To See/Hear Results – Three LED’s [Blue, Yellow, Red] & Beep To Indicate Scanning & Concentration Levels
- No Disposables Or Chemicals – No Messy, Expensive “Test Kits”
- Long-Life Rechargeable Li-Ion Battery, Virtually No Operating Cost
- USB Interface For Storing Results With Date/Time Stamp & Positive/Negative Results

*Back of Scanner*



*Front of Scanner*



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## Type: Handheld, Self-Contained, Optical Non-Contact Illicit Drug Detector

<b>Substances Detected</b>	Powdered And Crystalline Methamphetamine/Pseudoephedrine & Fentanyl W/Without Adulterants
<b>Maximum Sensitivity: Law Enforcement</b>	0.1% - 1% (Yellow LED; >1% (Red LED) For Meth; 100µg (Yellow LED), >900µg (Red LED)
<b>Environmental</b>	-20°C to +60°C [-4° F to 140° F], Non-Condensing
<b>Substance Detected Display</b>	Yellow LED = Trace Detected; Red LED = Positive Above Threshold + Internal Beeper
<b>Min/Max Operating Distance</b>	2.0" (51mm)

### Optical Specifications

<b>Operating Wavelength</b>	235nm to 450nm
<b>Detection Method</b>	UV Photoemission/Reflection Spectroscopy
<b>Scan Area Indicator</b>	2 Intersecting Red Laser Pointers
<b>Active Scan Area</b>	0.5" Diameter @ 2" Standoff
<b>Max Scanning Speed</b>	0.5" (1.27 cm) Per Second
<b>Photon Collection Area</b>	127mm <sup>2</sup>
<b>Illumination</b>	UV LED

### Display/Controls

<b>Positive Indicator</b>	Yellow = Trace Detected; Red = Positive Above Threshold
<b>Battery Low Indicator</b>	Flashing Blue LED, Rear Panel
<b>Power On Indicator</b>	5 Rapid Flashes of Blue LED, Rear Panel
<b>Power On/Off</b>	Pushbutton, Rear Panel
<b>Data Interface/Battery Charge</b>	USB-C Connector

### Electrical Specifications

<b>Battery Life</b>	120 Days With Unit Off; 10 Hours Scanning With Full Charge
<b>Power Source</b>	Li-ion Rechargeable Battery
<b>Programming Interface</b>	USB-C, Female
<b>Scan Switch</b>	Membrane Pushbutton, Both On Side & Rear Panel

### Mechanical Specifications

<b>Size</b>	1" (H) x 3.25" (W) x 6.7" (L) (2.5 cm x 8.2 cm x 17 cm)
<b>Unit Weight</b>	16 oz. (0.454 kg)
<b>Case Color</b>	Black
<b>Protective Case:</b>	4.3" (H) X 7.5" (W) X 9.1" (L)
<b>Total Weight In Case</b>	3.25 pounds (1.5kg)

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