



Highly advanced laser technology designed to detect natural gas with the aim of enhancing safety and improving detection for fire services, first responders and utility markets.

## **Features**

- Quickly scan common venting points from a Safe
   Distance
- Highly visible, sunshine resistant Guide Laser equipped for location accuracy
- **Graphical Interface** for easy user interpretation
- Color Camera with Bluetooth, WiFi, and datalogging onboard
- Trusted Technology used in gas utility since 2005
- Built to Intrinsic Safety specifications submitted certification pending





# **Gas Laser**

### **Specifications**

#### **General**

Weight	3 lbs (approx.)
Carry case dimensions	21" x 17.5" x 9.5"
Display	3.5" color LCD
Storage	Internal SD card (not removable)

#### **Power**

Battery	Removable Rechargeable Lithium-ion pack, 10.8 VDC 2.6Ah
Battery Run Time	8 hours at 32°F (approx.)
Battery Charger	External 110-240 VAC, 50/60 Hz Universal
Charge Time	2-3 hours full charge (approx.)
Charging Indicator	Integrated into Dual Battery Charger

### **Detection/Measurement System**

Detection Method	Tunable Diode Laser Absorption Spectroscopy (TDLAS)
Detection Distance	100 ft (30m) nominal - may vary due to background type and conditions
Measurement Range	0 to 50K PPM-M
Sensitivity	5 PPM-M at distances from 0 to 100 ft (30m)
Beam Size	Conical in shape with a 22" diameter at 100 ft (55cm at 30m)

#### Lasers

IR Laser	Class I
Spotter Laser	On time duration is 2 minutes Class 2(II)<2mW @532nm Spot Size is 7mm at 15M
Eye Safety Warning	Do not stare into beam or view directly with optical instrument

### **Display**

Resolution 320x240

#### Camera

Color	
Aperture	f/2.6
FOV	94DEG (ató.0mm image circle)

#### **GPS**

Compatible with GPS / GLONASS / Beidou / Galileo

### **Communication**

Bluetooth 4.2 BLE (to support future features and mobile applications)

Wi-Fi

USB Dual Mode

#### **Alarms**

Digital Methane Detection (DMD)	Audible tone and visible color border when detection threshold exceeded
Adjustable Detection Alarm Level	
50'	1 to 200 PPM-M
100′	1 to 400 PPM-M
System Fault & Warnings	Audible alarm and visual indication on the display

## **Testing**

Built-In Self-Test	Verifies operation and adjusts laser wavelength for maximum sensitivity
Test Gas Cell	Integrated within carrying case

## **Datalogging**

Saves to Internal Memory	FAULT logs Self-Test logs Captures
Data Collected	Includes but not limited to: CH <sub>4</sub> PPM-M measurement GPS location Timestamp Battery level Battery voltage Serial number of the instrument

## **Operating Conditions**

Operating Temperature	$0^{\circ}$ to +122°F (-17° to 50°C)	
Humidity	5 to 95% RH, non-condensing	

## Regulatory

Instrument Protection	IP54 (water splash and dust resistant)
Compliance	EMC (EN61000-6-2, EN6100-6-4)
Radio Equipment Directive	(2014/53/EU) ETSI EN 301 489-1 v2.2.0
FN 61326-1:2013	

47 CFR Part 15 & ICES-003

