



Models

- >TS12HLR
- >TS12HLP
- >TS12HLF
- >TS230HL
- >TS230HLR
- >TS230HLF
- >TS230HLW
- >& Many More...



TrueSafe

Gas Leak Detector
For Heat & LPG/LNG/CNG/PNG

Specifications

Improvement of product and its features is a continuous process. Hence, specifications below are subject to change without any notice.

1. Gases Detected LPG, Natural Gas etc. as per model
2. Alarm type Red LED Indication for Gas
 Yellow LED Indication for Heat
 Relay Output (Optional)
 Audible Alarm (Optional)
 Sense Output for VDP (Optional)
3. Power supply 230v \pm 10%, ac 50 Hz.
 For TS230 & TS230R
 +12VDC for TS12R
4. Power consumption about 0.5 Watts
5. Operating temperature -10[°] to + 70[°]
6. dimensions 111mm x 90mm x 40mm

Introduction

The TrueSafe Gas Leak Detector is designed for detecting and early warning of Gas leaks. This Microprocessor based, wall mounted device is specially designed for domestic application.

The detector is provided with inbuilt power supply and can be directly plugged into the socket of 230VAC, 50Hz domestic supply (TS230 & TS230R).

Bargraph for Gas Concentration (Optional)

Flasher (Optional)

For detection of gas leak

Heat LED - For detection of Temperature exceeding 60°C



1. Know Your Vighnaharta TrueSafe

Vighnaharta TrueSafe is capable of detecting and giving early warning of LPG (or LNG/PNG/CNG etc) leaks from cylinders or through pipelines. Thus it protects you from the hazards of a possible gas explosion before it occurs. However care should be taken to choose the right location for the unit by following the installation procedure.

The kit consists of :

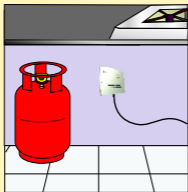
- > TrueSafe with power cord
- > Test Gas bottle
- > One wooden plug & screw
- > User Manual

2. Installation Procedure

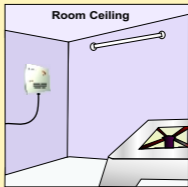
LPG is heavier than air. It has a tendency to settle down. Hence, **Vighnaharta TrueSafe** must be installed at 30 cm height from the floor if you are using LPG cylinder. For Natural gas (LNG/PNG/CNG etc), it should be installed 30cm below the ceiling. Natural gas is lighter than air.

Fixing the unit :

Having selected the right location, proceed to fix the unit on the wall, following the guidelines given earlier. The necessary wall plugs & retaining screws are provided with the unit.



LPG



Natural Gas

Care to be taken while installing

Locations to be avoided for installing

Vighnaharta TrueSafe

- ! Very near to an exhaust fan.
- ! By the side of a door or window.
- ! An enclosed space e.g. Inside the cupboard.
- ! Directly above the gas stove.
- ! Places where water can splash on the unit.



3. Operation

When the TrueSafe is powered ON it enters the Warm-Up period of approximately one min. Gas leak & Heat LEDs flash rapidly & simultaneously during Warm-Up period. Once it is over, the detector shall enter in to 'Sense' or 'Normal' mode. During this mode Gas Leak and Heat LEDs flash alternately.

When Gas leak is detected (when Gas concentration crosses 10% of LEL) , unit gives VISUAL & AUDIBLE ALARM (only in TS230B & TS12B or models with suffix B) The Red LED, marked 'GasLeak', will be ON & an audible buzzer will sound with short beeps (0.5Sec ON & 0.5Sec OFF). Both these alarms shall be ON as long as the gas is trapped inside the detector. Once the Gas is dispersed both the alarms (audio & visual) will reset. When the temp above 60°C is detected, Yellow LED marked Heat shall be continuously ON and buzzer shall sound with long beeps (3 Sec ON & 1 Sec OFF) .
Relay Output(TS230R/TS12R) : Relay will operate in Alarm State and shall be reset when alarm condition is over. This relay output can be used to trigger any external device such as siren, dialer etc. TrueSafe shall enter in to Alarm State when either Gas Leak or Heat is detected.

For Models with Suffix F(with Bargraph & Flasher), indication is provided for different levels of Gas concentration. 2.5%, 5% & 7.5% of Lower Explosive Limit (LEL) are indicated by Green LED. 10% of LEL is indicated by Red LED. As the concentration level increases, LED bargraph will show level in LEL%. Upon crossing 10% LEL mark, Red flasher LEDs shall start flashing.

Note : LEL for LPG is 2.5 % of Gas in given air volume.

Interfacing with other equipment

Interfacing with other equipment Models TS230R & TS12R can be interfaced with other equipments like security panels, Video Door Phone Systems etc. Interfacing is done with the help of relay output which is in the form of NO & NC contacts. Refer to the following table for Connections.

Supply Voltage Connections

Supply Voltage	Wire Type	Connection to
230VAC	Two pin plug with power chord	5A Socket
+12VDC	Red wire	DC Power Supply +ve
Ground	Black wire	Ground of Power supply

Relay Connections(For Models with Relay Output)

Wire Type	Wire Colour	Connection to equipment
NO	Yellow	Panic or Gas Sense Input
NC	Blue	Panic or Gas Sense Input
Common	Brown	Ground

Sense Output Connection(For Models with P Suffix (Equivalent to our earlier model LD12)

Wire Colour	Connection to Video Door Phone
Brown	To be connected to Sense Input

For Models with Suffix V

Models with Gas valve can be used to switch off the Gas supply in order to stop the Gas Leak. (plunger of the valve will be pushed in). To reset the valve plunger should be pulled out manually.

4.Do's & Don'ts When Gas Leak occurs

A)Don'ts

Do not panic.

Do not put OFF/ON any switch.

Do not try to put OFF electric plug.

Do not light any kind of fire or lamp.

B) Do's

If the gas leak is severe it is very dangerous for anybody to enter the premises.

Call Fire brigade/Gas dealer.

If there is a minor/moderate gas leak-Turn off the knob, regulators etc, to stop the gas supply.

Open all doors & windows.

5.Routine Check of Vighnaharta TrueSafe

To ensure that **Vighnaharta TrueSafe** is in working condition, it is necessary to check daily that

Gas Leak & Heat LEDs are flashing alternately.

For checking that the unit has not lost it's sensing capability, it is necessary to check the unit once in a month, by applying the gas from the test gas bottle supplied with the unit. This can be done by releasing the gas from the gas bottle. The Gas leak LED (Red) should glow and alarm buzzer should sound. Close the gas being released from the bottle.

Disclaimer For TrueSafe

All statements, technical information and recommendations contained herein are based on available scientific and technical know how, which we believe are true and reliable. However, neither the manufacturer nor the seller shall be liable for any loss, injury, earth, damage direct or consequential arising out of the use of or the inability to use the product. The purchaser and / or user shall determine the suitability of the product for his intended use and user assumes all risk and liability, whatsoever, in connection therewith. No statement or recommendation contained herein shall have force or effect unless in an agreement signed by officers of manufacturer or seller. Seller's and manufacturer's only obligation shall be limited to replace the product which is proved to be having manufacturing defect and returned with in the warranty period.

Terms of Warranty

1. All models of TrueSafe detectors are warranted against any manufacturing defects for a period of **Twelve months** from the date of purchase. The company shall repair/replace only the part or a part which proves to be defective due to faulty material or workmanship.
2. The warranty extended herein is confined only to the extent of repair/replacement of defective parts and does not cover any consequential or resulting liability, damage or loss arising due to such defects. Furthermore, the warranty, in no case, shall extend to any monetary consideration whatsoever.
3. The cost of to & fro transportation of TrueSafe to the nearest service center will be borne by the purchaser.
4. **The warranty will be void if :** **a)** The damage is caused by accident, flood, fire, misuse, negligence or erratic voltage fluctuation **b)** If service or repair has been attempted by persons not authorized by the company **c)** The company copy of warranty card is not sent to the company within **Fifteen Days** of purchase.
5. All disputes are subject to the jurisdiction of courts in Pune only.

Models - Basic Models

Sr.No.	Item	Description
1.	TS 230 XXXX	Operated on 230V AC 50Hz
2.	TS12 XXXX	Operated on 12V DC
3.	TS 110 XXXX	Operated on 110V AC 60Hz

Suffixes : XXXX

Grade

Sr.No.	Item	Description
1.	H	Used for Residential purpose
2.	C	Used for Commercial purpose

Sensors

Sr. No.	Item	Description
1.	L	Used for Deterction of LPG
2.	N	Used for Detection of Natural Gas (LNG/CNG/PNG)
3.	M	Used for Deterction of Methane
4.	D	Used for Deterction of both LPG & LNG (Dual Purpose Sensor)
5.	C1	Used for Deterction of Carbon Monoxide(CO)
6.	C2	Used for Deterction of Carbon Dioxide(CO ₂)

Outputs

Sr.No.	Item	Description
1.	B	Buzzer Output 85dB
2.	R	Relay Output Wires for NO, NC and Common
3.	F	Flasher Output with Bargraph
4.	W	Wireless Output
5.	V	Gas Valve
6.	P	Sense Output for Video Door Phone - +12V output through 100Ω

TS230HLBFR This model for household use, will operate on 230VAC and will have Buzzer, Flasher & Relay Output

TrueSafe : Warranty

(Customer Copy) Sr. No. _____

We hereby extend warranty for TrueSafe for a period of 12 calendar months from the date of purchase to the original purchaser against any defects in materials and workmanship, In case of any defects we undertake to repair the same free of charge, as per the terms of warranty. This warranty will be void if the defect arises due to mishandling or tampering of the product. The warranty is limited to the extent of replacement of the product. We are in no way liable for any other loss or claims.

Name: _____

Address: _____

Tel.: _____ E-mail: _____

Bill No.: _____ Dt. of purchase: _____

Warranty valid upto: _____

Dealer's Sign & Rubber Stamp



Realty Automation & Security Systems Pvt. Ltd

5, New Sadashiv Peth, Near Alka Talkies,
Pune - 411 030. Maharashtra, India

TrueSafe : Warranty

(Customer Copy) Sr. No. _____

We hereby extend warranty for TrueSafe for a period of 12 calendar months from the date of purchase to the original purchaser against any defects in materials and workmanship, In case of any defects we undertake to repair the same free of charge, as per the terms of warranty. This warranty will be void if the defect arises due to mishandling or tampering of the product. The warranty is limited to the extent of replacement of the product. We are in no way liable for any other loss or claims.

Name: _____

Address: _____

Tel.: _____ E-mail: _____

Bill No.: _____ Dt. of purchase: _____

Warranty valid upto: _____

Dealer's Sign & Rubber Stamp



Realty Automation & Security Systems Pvt. Ltd
5, New Sadashiv Peth, Near Alka Talkies,
Pune - 411 030. Maharashtra, India

Postal stamp

To,

Realty Automation & Security Systems Pvt. Ltd.

5, New Sadashiv Peth, Near Alka Talkies,
Pune-411030

E-: mail-sales@vighnaharta.in

visit us : www.vighnaharta.in