



AST-SV



AST-SC / AST-E



PLC



Panel Mounting



Ammonia Detector  
with Panel

# AMMONIA LEAK DETECTOR

## INTRODUCTION

In response to today's ever-increasing demand for speed, accuracy and performance Manik Engineers has introduced the Ammonia Leak Detector for Cold Chain Solutions.

The Manik Ammonia Leak Detector provides precise, stable readings and even in demanding environments are simple to operate, fast, reliable and built to last.

## KEY FEATURES:

- Three Level Alarm for each channel
  1. First - Contamination
  2. Second - Early Warning
  3. Final - Alarm

These alarms have been designed as per international guidelines. The alarm levels are site adjustable from 0-1000ppm.

- Multi-point Alarm Units.
- Operates on 230VAC, 50Hz, with inbuilt power supply for Ammonia Transmitters
- Alarm Hooter(90dB) for quick detection in noisy environments.
- Robust case for long life in harsh environments
- Continuous monitoring
  - Low zero point drift
- Stable Positioning
  - Easy maintenance / calibration
- Reverse polarity protected
  - Overload protected
- Long life sensor
- 4-20 mA analog signal output from Transmitter
- IP 44 protected enclosure, for panel and wall mounting application
- LAN / RS485 modbus protocol for PLC / SCADA interface.

### Additional features for PLC Based Version:

- 7" TFT Colour touch screen graphic display.
- Set point and relay output for individual channel.
- SMS alert on 5 phones

### Ammonia Sensor (AST) :

The Manik GP-SA stand-alone detector represents one of the lines in a new generation of gas detectors featuring an integrated microprocessor. The detector continuously monitors the ammonia concentration for 0-1000 ppm range. In the Manik GP-SA detector the sensor signal is converted to a linear output signal of 4-20 mA.

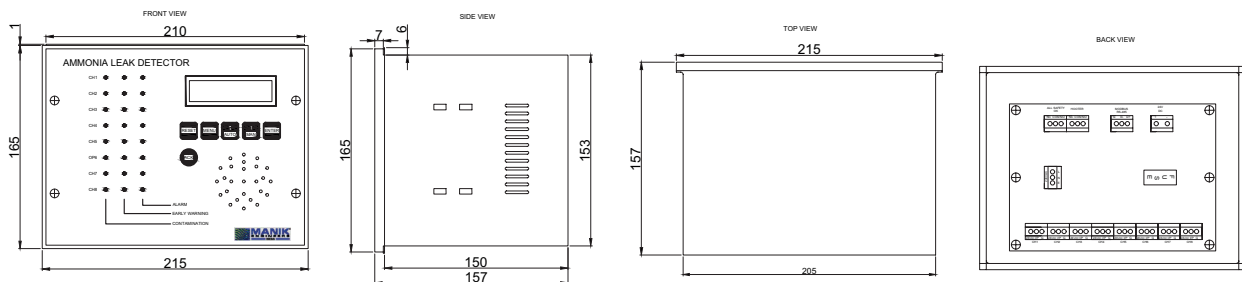
## LIMITS OF TOXICITY FOR AMMONIA

Minimum detectable concentration	10 ppm
TWA value	50 ppm
Serious irritation level	250 ppm
Limit to tolerable breathing	500 ppm

## SPECIFICATION:

Resolution	0.1%
Operating Temperature	0°C —> 50°C
Measuring Range	0 to 1000 ppm
Supply Voltage	230VAC, 50Hz, AC 1 Phase
Transmitter Power Supply	24 VDC inbuilt
Display	16X2 Lines LCD Display
Sensor Open Circuit	Indicated by "Open"
Environmental Specifications	IP 54
Sensor element	Semi-conductor / Electrochemical
Instrument Accuracy	0.5% of full range

## DIMENSIONS :



The overall performance of the instrument is obtained by combining the stated accuracy and any uncertainty due to the measurement process.

	Dimensions (mm) (H x W X D)	Weight
IP-65	300 x 250 x 110	2.5 kg
Panel Mounting (Cutout)	207 x 157 x 150	2.8 kg
Panel	400 x 420 x 250	16.6 kg

## ORDERING INFORMATION

MODEL NO.	Weight (kg)
LDS-01 Single Point	2.8
LDS-02 Two Point	2.8
LDS-04 Four Point	2.8
LDS-06 Six Point	2.8
LDS-08 Eight Point	2.8
LDS-12 Twelve Point	2.9
LDS-16 Sixteen Point	2.9
LDS-24 Twenty Four Point	3
LDS-08CM 8 Point with RS485	2.8
LDS-16CM 16 Point with RS485	3
LDS-24CM 24 Point with RS485	3.2
PLC with panel modem SMS facility PLDS-08CM (Eight Point)	—
PLC with panel modem SMS facility RS485 PLDS-16CM	—
PLC with panel modem SMS facility RS485 PLDS-24CM	—
Detector Panel upto 8 Point	—
Detector Panel upto 16 Point	—