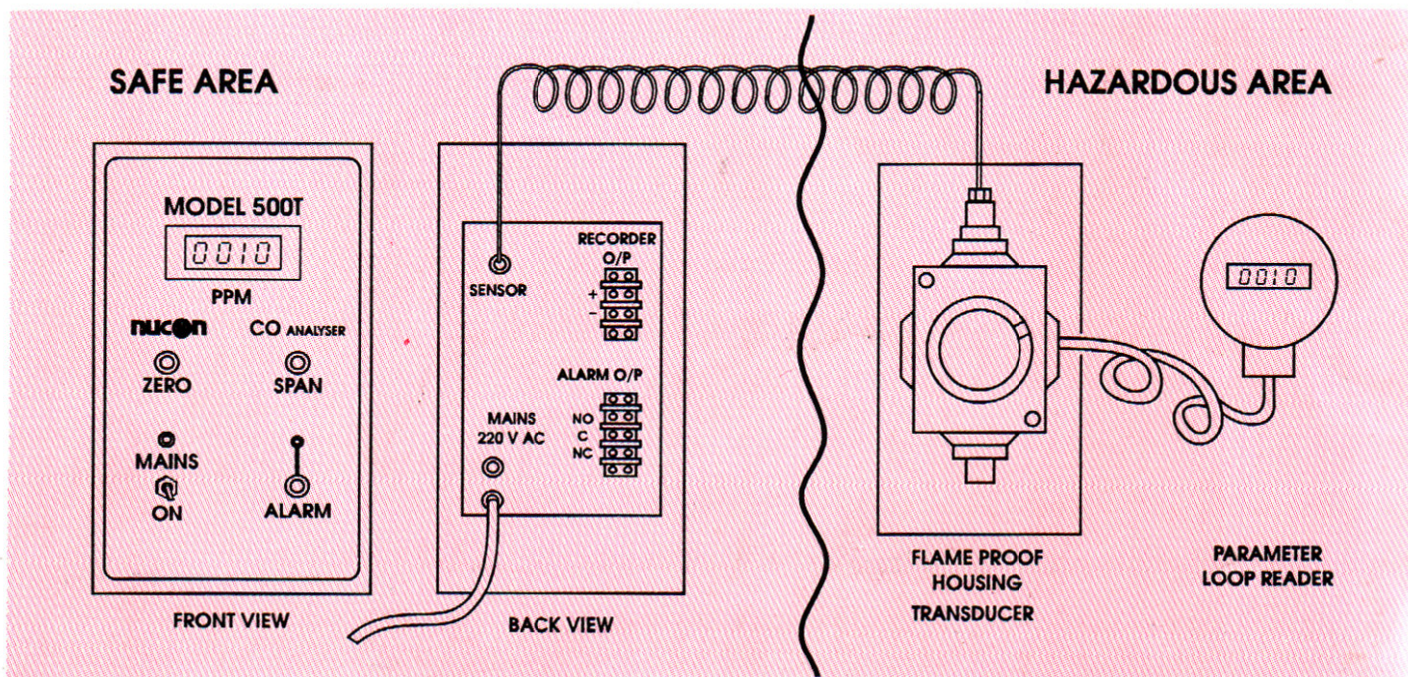
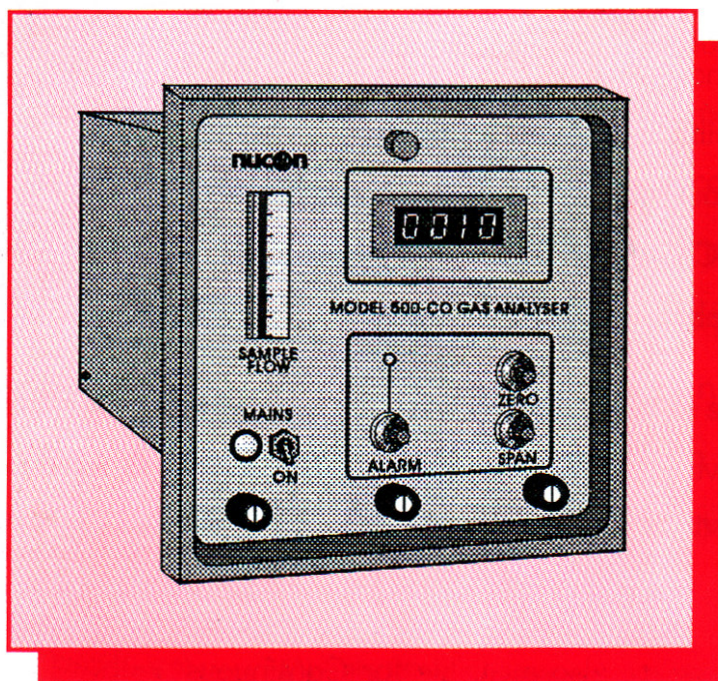


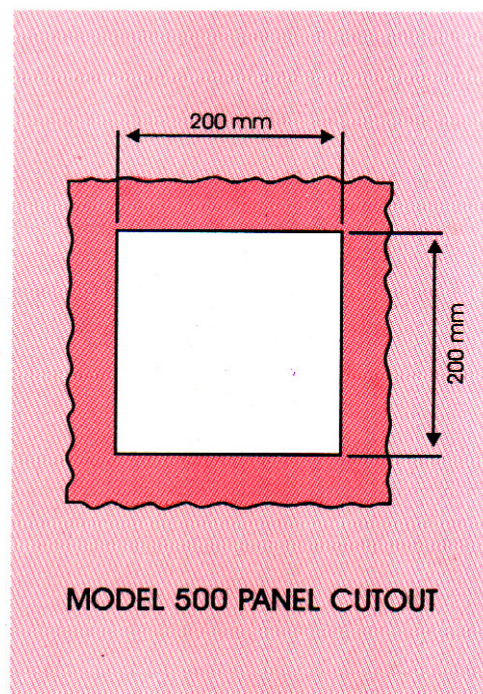
ON LINE PANEL MOUNTING TOXIC GAS ANALYSER

**CARBON MONOXIDE/NITRIC OXIDE/NITROGEN DIOXIDE/SULPHUR DIOXIDE/HYDROGEN
HYDROGEN SULPHIDE/CHLORINE/HYDROGEN CHLORIDE/AMMONIA/HYDROGEN CYANIDE
PHOSPHINE/CHLORINE DIOXIDE/ETHYLENE OXIDE /OZONE**



MODEL 500

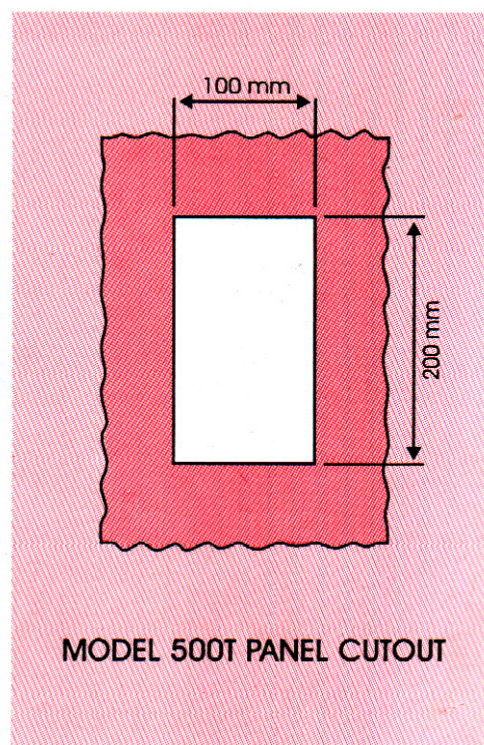
NUCON series 500 Toxic Gas Analyser provide continuous analysis of any one of the listed gases. Models are specified as 500 followed by name of gas e.g. **Model 500 CO**. These are Panel Mounted Instruments; with optional back stand can also be used for Bench Top applications. Models for monitoring two or more gases simultaneously in one gas stream are also available e.g. **Model 500 CO+H₂S**. These have individual digital displays, Span and Alarm setting for each gas. Front Panel Setting Alarm Facility is provided and status is displayed via an LED. The alarm output is one pole two way relay with potential free NO, C, NC contacts on the back panel. Option of multiple Alarms available.



Series 500 are complete self contained instruments with facilities for Flow Control, Flow Indicating and Sensor Isolation Valve. The inlet gas pressure can be in a very wide range i.e. 0.1 to 5 kg/sq cm.

MODEL 500T

Series 500 Gas Analysers are also available for Continuous Atmospheric Monitoring (or remote process monitoring) in **Remote Sensor cum Transmitter Module** cable connected to Control Module (220 V Mains operated) designated as Model 500T. It operates in 4 to 20 mA Transmitter configuration. The Sensor Module can be placed at a distance from the Control Module. While the Control Module is in Safe Area, the Sensor Module can be located in Hazardous Area in which case Safety options like Flame Proof Enclosure are provided. Optional self powered Loop Reader in Flame Proof Housing for Local Parameter display are available. Series 500T is ideal for Plant/ Pipeline leakage monitoring or for Atmospheric Environmental studies.



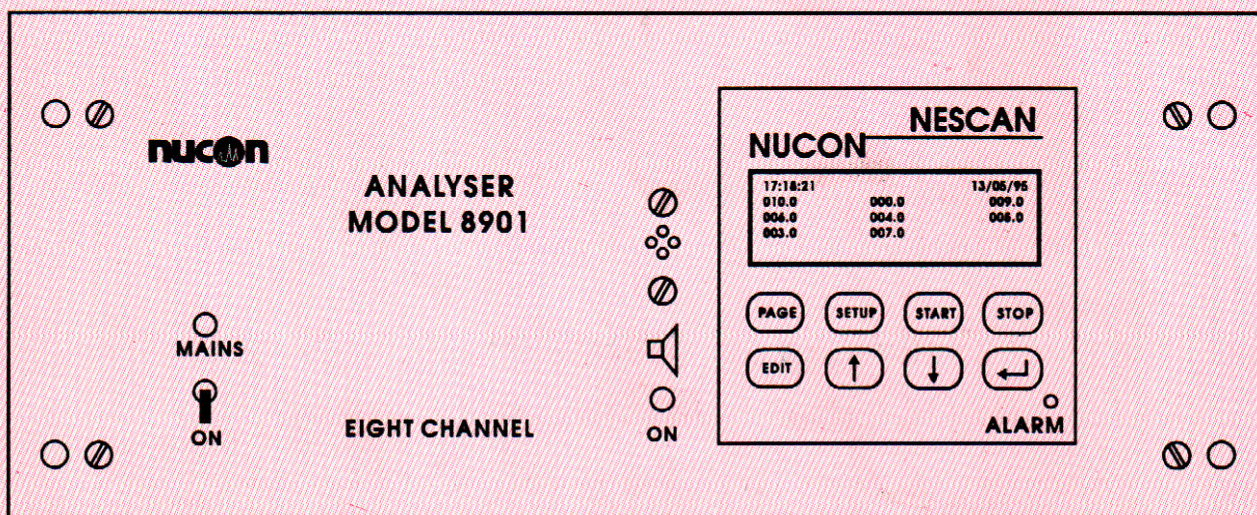
PRINCIPLE

The transducer is based on sealed electrochemical fuel cell that generates signal in direct linear proportion to the toxic gas concentration in the sample stream. It requires no periodic maintenance like replacing electrodes or electrolytes. The output is available on a digital readout. Recorder terminals are provided on the back panel.

FEATURES

- Intrinsically Safe Sensor.
- On Line Continuous Monitoring.
- Option of pressurised flow/remote atmospheric monitoring.
- Panel Mounting control Module
- Option of local self powered loop reader in ordinary or flame proof enclosure in transmitter configuration, for Model 500T
- Digital Readout In ppm or percentage.
- Continuous monitor with options of plain logging or computer connectivity for higher level reporting Systems can be configured as per project requirement.
- Front Panel adjustable level Alarm with visual indication and Relay Terminals.

For **Multiple Monitoring Studies** Nucon offers its Microprocessor controlled **Continuous Monitor Model 8901** with options of plain data logging display and alarms or computer connectivity for higher level reporting. Systems can be configured as per project requirement.



SPECIFICATIONS

Sensitivity

Gas Name		Range		Resolution		Resp. Time
						(secs. to 90%)
CARBON MONOXIDE	(CO)	0-1999	PPM	1.0	PPM	35
		or 0-4.000	%	0.001	%	30
NITROGEN DIOXIDE	(NO ₂)	0-199.9		0.1		35
SULPHUR DIOXIDE	(SO ₂)	0-199.9	PPM	0.1	PPM	25
		or 0-1999	PPM	1.0	PPM	30
CHLORINE	(Cl ₂)	0-19.9	PPM	0.1	PPM	60
NITRIC OXIDE	(NO)	0-199.9	PPM	0.1	PPM	35
		or 0-1999	PPM	1.0	PPM	20
HYDROGEN	(H ₂)	0-1999	PPM	1.0	PPM	70
		or 0-5.000	%	0.001	%	
HYDROGEN SULPHIDE	(H ₂ S)	0-199.9	PPM	0.1	PPM	60
HYDROGEN CHLORIDE	(HCl)	0-199.9	PPM	0.1	PPM	90
HYDROGEN CYANIDE	(HCN)	0-199.9	PPM	0.1	PPM	60
AMMONIA	(NH ₃)	0-199.9	PPM	0.1	PPM	100
PHOSPHINE	(PH ₃)	0-5.00	PPM	0.01	PPM	100
CHLORINE DIOXIDE		0-10.0	PPM	0.1	PPM	—
OZONE	(O ₃)	0-2.00	PPM	0.01	PPM	—
ETHYLENE OXIDE	(C ₂ H ₄ O)	0-20.0	PPM	0.1	PPM	—

Accuracy : ± 2% full scale

Display : Digital

Power Source : 220 V AC

Repeatability : 2%

Sensor Type : Fuel Cell

CROSS SENSITIVITY DATA

Effect of 100 PPM →

SERIES 500		CO	NO	NO ₂	H ₂	SO ₂	HCN	H ₂ S	Cl ₂	HCL
↓	CO	100	<5	<5	<60	<5	0	<5	0	0
	NO	0	100	<20	0	0	0	—	0	<10
	NO ₂	0	0	100	0	0	-3	-20	90	0
	H ₂	<5	35	0	100	3	35	10	0	3
	SO ₂	0	0	-125	0	100	60	125	-60	10
	H ₂ S	7	0	-20	0	15	0	100	-20	0
	Cl ₂	0	0	105	0	0	0	-20	100	0
	NH ₃	0	20	0	0	60	5	130	-50	-5
	HCl	<5	285	-20	0	100	<25	660	-30	100

Manufactured by :

NUCON ENGINEERS

S-18, OKHLA INDUSTRIAL AREA PHASE II, NEW DELHI - 110 020 INDIA
 TEL. : 6841013, 6911088, 6823818 FAX : 011-6910815 TELEX : 031-75377-NUON IN
 MUMBAI : 503, SOLARIS II, OPP. L&T GATE NO.6, SAKIVIHAR ROAD, POWAI, MUMBAI-400 072 TEL. : 8524674

A POLICY OF CONTINUOUS PRODUCT IMPROVEMENT MAY MAKE THIS INFORMATION OUTDATED. WE RESERVE THE RIGHT TO MAKE CHANGE WITHOUT PRIOR INTIMATION.