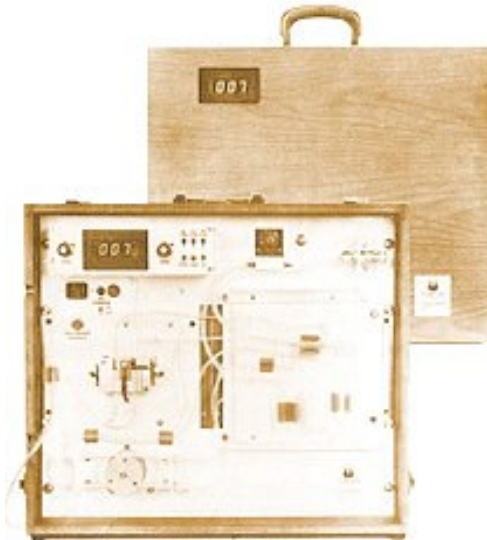


PORTABLE AC/DC TOXIC GAS MONITOR

TGM 555

FEATURES

- TRULY PORTABLE
- CONTINUOUS ON-SITE READOUT
- HIGH SENSITIVITY
- USES STANDARD CHEMICAL PROCEDURES
- PORTABLE AC/DC OR PERMANENT RACK MOUNTING
- LIGHTWEIGHT
- RUGGED FOR USE ANYWHERE
- COMPLETELY SELF CONTAINED
- RECORDER OUTPUT
- EASILY CONVERTED TO OTHER ANALYSES



MODELS ARE AVAILABLE FOR NH₃, Cl₂, FORMALDEHYDE, N₂H₄, HCl, HCN, HF, H₂O₂, MERCAPTANS, NO₂, NO_x, PHENOL, PHOSGENE, SO₂, TO_x, NICOTINE, TOTAL ALDEHYDES among others.

The interchangeable TGM 555 air monitor weighs only 30 pounds and measures 20" X 16" X 7". That's ultra portability. It is a rechargeable battery operated unit that can provide over 12 hours of independent DC operation. It can also run on AC for laboratory operations for indefinite periods.

The TGM 555 can be taken into places completely inaccessible to other analyzers. It was designed to be hand carried into the field, into the plant, as well as used in stationary installations, even in moving vehicles.

The TGM 555 is truly flexible and easily interchanged. All that is required is to change reagent(s), and in some cases, to change the analytical module tray which contains the necessary glassware. The unit is extremely sensitive and for many of the analyses can operate over a range of maximum sensitivity of 0-0.25 ppm full scale, detecting as minute a quantity as 0.005 ppm or 5 ppb of the gas to be measured, adjustable to a full scale range of more than 10 ppm. Yet it is significantly lower in cost than other air pollution data acquisition systems you can buy.

The TGM 555 is extremely precise, quick to respond, simple to operate, and utilizes, where possible, techniques in accordance with the latest EPA reference methods and NIOSH publications.



CEA Instruments, Inc.

"EXPERTS IN TOXIC GAS DETECTION"

TGM 555 SPECIFICATIONS

FORMALDEHYDE ANALYZER

Standard Range	0-2 ppm (adjustable from 0-0.5 up to 0-10 ppm full scale)
Low Level Range	0-500 ppb
Reproducibility	1%
Minimum Detection	0.005 ppm (5 ppb) at 0-0.5 ppm full scale or 1% full scale
Nonlinearity	Less than 2% up to 2.5 ppm
Zero Drift	Less than 2% per 24 hours
Span Drift	Less than 2% per 24 hours
Airflow Drift	Less than 1% per 24 hours
Zero Noise	+/- 0.3%
Lag Time	8 1/2 Minutes
Rise Time	(90%) 4-1/2 minutes
Fall Time	(90%) 4-1/2 minutes
Air Sample Flow Rate	0.5 liters per minute
Optimum Temperature Range	60° F to 80° F (Usable at 40° F to 120° F)
Relative Humidity Range	5 to 95%
Dimensions	20"L x 16"H x 7"D
Weight	30 pounds
Power Requirements	12VDC unregulated, 4 watts, 115/230 VAC, 50/60 Hz (specify)
Operating Period	12 hours, fully charged internal batteries
Recorder Output	0-1V 2K impedance

(Specifications subject to change without notice.)

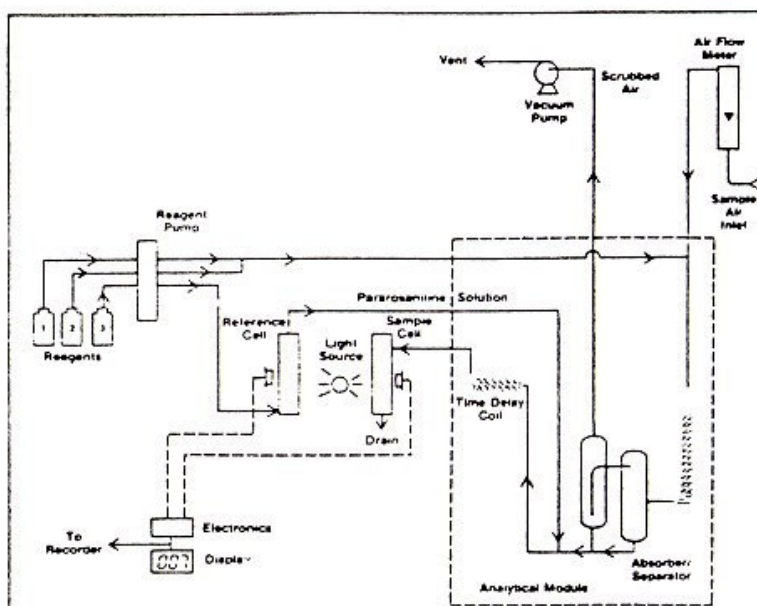


CEA Instruments, Inc.

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E-Mail: ceainstr@aol.com Website: www.ceainstr.com

PRINCIPLE OF OPERATION

The TGM 555 contains a rechargeable battery and a constant volume adjustable air pump. An air sample is continuously drawn into the unit and any formaldehyde present is scrubbed with a sodium tetrachloromercurate solution that contains a fixed quantity of sodium sulfite. Acid bleached pararosaniline is added and the intensity of the resultant color is measured at 550 nm by a colorimeter and displayed on a digital readout. A recorder output is also provided and both formaldehyde in air and liquid samples can be analyzed.



AVAILABLE ANALYSES

PARAMETER		METHODOLOGY	TYPICAL FULL SCALE RANGES*
Ammonia	NH ₃	Modified Berthelot	0-10 ppm adj up to 0-50 ppm
Chlorine	Cl ₂	DPD Procedure	0-0.25 ppm adj up to 0-5 ppm
Ethylene Glycol	MEG	Na Paraperiodate	0-0.5 ppm adj up to 0-50 ppm
Formaldehyde	HCHO	Pararosaniline	0-0.5 ppm adj up to 0-10 ppm
Hydrazine	N ₂ H ₄	p-DMAB	0-2.5 ppm adj up to 0-20 ppm
Hydrogen Chloride	HCl	Thiocyanate Method	0-10 ppm adj up to 0-50 ppm
Hydrogen Cyanide	HCN	Chloramine T/Pyr-Barb	0-0.25 ppm adj up to 0-1 ppm
Hydrogen Fluoride	HF	Zirconium-SPADNS	0-1.0 ppm adj up to 0-10 ppm
Hydrogen Peroxide	H ₂ O ₂	KI/Mo/DPD	0-0.25 ppm adj up to 0-5 ppm
Hydrogen Sulfide	H ₂ S	Methylene Blue	0-0.5 ppm adj up to 0-20 ppm
Mercaptans	RSH	PAMA/FeCl ₃	0-1.0 ppm adj up to 0-20 ppm
Nicotine	NIC	CNBr-Aniline	0-0.5 ppm adj up to 0-10 ppm
Nitrogen Dioxide	NO ₂	Mod. Griess-Saltzman	0-0.25 ppm adj up to 0-10 ppm
Oxides of Nitrogen	NO _x	CrO ₃ Oxidation	0-0.25 ppm adj up to 0-10 ppm
Phenol	C ₆ H ₅ OH	4-Aminoantipyrine	0-0.5 ppm adj up to 0-10 ppm
Phosgene	COCl ₂	NBP/PBA	0-0.25 ppm adj up to 0-5 ppm
Sulfur Dioxide	SO ₂	West-Gaeke	0-0.25 ppm adj up to 0-10 ppm
Total Aldehydes	TA	MBTH	0-0.1 ppm adj up to 0-10 ppm
Total Oxidants	TOx	KI/DPD	0-0.25 ppm adj up to 0-5 ppm

*With optional stream splitters all ranges can be multiplied by a factor of 10 or 100

(Specifications subject to change without notice.)

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TGM 555 SPARE PARTS PRICE LIST

TGM 555 units are no longer manufactured. Please visit our website for other gas monitors.

ANALYTICAL MODULE (Interchangeable chemistry tray)

AMK-1	for NO ₂ analysis	\$ 675.00
AMK-2	for HCl *, N ₂ H ₄ *, HF, Cl ₂ , H ₂ O ₂ , or Phenol analysis	\$ 695.00
AMK-3	for SO ₂ analysis	\$ 775.00
AMK-4	for Formaldehyde or Glutaraldehyde analysis	\$ 775.00
AMK-5	for H ₂ S or Mercaptan analysis	\$ 775.00
AMK-6	for HCN or AN analysis	\$ 775.00
AMK-7	for NH ₃ analysis	\$ 875.00
AMK-X	Other Analytical Modules are available for additional gas analyses *Requires special interchangeable photodetectors	

RECOMMENDED SPARE PARTS

PART NO.	DESCRIPTION	AMOUNT	PRICE
T-A040	System Connector Kit	1 Kit	\$ 40.00
T-A045	Sample Cell	1	\$ 80.00
T-A046	Reference Cell	1	\$ 60.00
T-A056	Zero Gas Scrubber	1	\$ 20.00
T-A065	Glass Weights, Set of 2	1 Set	\$ 15.00
T-A066	Air Vacuum Pump	1	\$ 495.00
TSP-50	Spare Parts Maintenance Kit – Contains above recommended Spare Parts		\$ 710.00
T-A048	Photocells, Matched Pair	1 Pair	\$ 225.00
T-A049	Photometer, Lamp Assembly	1	\$ 225.00
T-63	.063 ID, 5-1/8" Pump Tubing Kit	12 Pieces (Typically a 1 Year Supply)	\$ 50.00
T-78	.078 ID, 5-3/8" Pump Tubing Kit	12 Pieces (Typically a 1 Year Supply)	\$ 55.00
T-94	.094 ID, 6" Pump Tubing Kit	12 Pieces (Typically a 1 Year Supply)	\$ 60.00

OPTIONAL REPLACEMENT PARTS

PART NO.	DESCRIPTION	AMOUNT	PRICE
T-B030	Zero Gas Scrubber, Set of 6	1 Set	\$ 120.00
T-B032	Zero Gas Filter Holder	1	\$ 120.00
T-B035	Peristaltic Pump Motor, 6 VDC, with Gear	1	\$ 495.00
T-B036	Air Sample Bulkhead Fitting, Teflon	1	\$ 120.00
T-B041	Air Scrubber	1	\$ 225.00
T-B042	Liquid / Air Separator	1	\$ 300.00
T-B060	Teflon Sample Line, 25 Feet	1	\$ 125.00
T-B067	AS 300 Vacuum Pump Diaphragm	1	\$ 50.00
T-B070	Reagent Lines, Set of 3	1 Set	\$ 85.00
T-B075	Reagent Container, Set of 3	1 Set	\$ 80.00
T-B090	Battery, 12 V	1	\$ 80.00



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TGM 555 SUPPLEMENTAL SPARE PARTS PRICE LIST

PART NO.	DESCRIPTION	AMOUNT	PRICE
T-B043	Standard Glass Mixing Coil	1	\$ 90.00
T-B044	Lower Glass Mixing Coil	1	\$ 110.00
T-B046	Double Glass Mixing Coil With Center Inlet (AMK-5)	1	\$ 250.00
T-B047	Half Glass Mixing Coil (AMK-6)	1	\$ 52.00
T-B048	Half Glass Mixing Coil (AMK-7)	1	\$ 70.00
T-B050	Glass Double Tee	1	\$ 50.00
T-B051	Debubbler (or Drain Tee)	1	\$ 24.00
T-B052	Glass Tee With Platinum Nipple	1	\$ 80.00
T-B071	Transmission Tubing, Micro	Per Foot	\$ 2.00
T-B072	Plastic Tee, 1/16"	1	\$ 2.00
T-B073	Plastic Elbow, 3/32"	1	\$ 3.00
T-B092	Digital Meter	1	\$ 470.00
T-B093	Recorder Cable	1	\$ 70.00
T-B094	Zero Control Potentiometer	1	\$ 72.00
T-B095	Span Control Potentiometer	1	\$ 72.00
T-B096	Air Pump Potentiometer	1	\$ 90.00
T-B097	Battery Charger Assembly	1	\$ 220.00
T-B098	Main Printed Circuit Board	1	\$ 700.00
T-C1247	Nylon Roller Sleeve	1	\$ 6.00

CONTACT US FOR ANY OTHER TGM 555 SPARE PARTS OR SUPPLIES NOT SHOWN ON THIS PRICE LIST

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