

The Tanabyte 72x Series of Photometric Ozone Analyzers

Precision instruments for the Measurement and Calibration of Ozone

Direct Drop-In
Replacements for the
Dasibi Model 1008 series

USEPA APPROVED INSTRUMENTS

722 Ambient Ozone Analyzer • 723 Transfer Standard with Cal/Sample Valves
724 Ozone Transfer Standard • 725 Ozone Analyzer with Internal Zero/Span
726 Ozone Analyzer with Cal/Sample Valves • 734 Ozone Primary Standard



Model SA1-724 Ozone Transfer Standard
(SA1 Enclosure Type)



Model SA2-722-724 Ozone Analyzer / Ozone Transfer
Standard Combination (SA2 Enclosure Type)

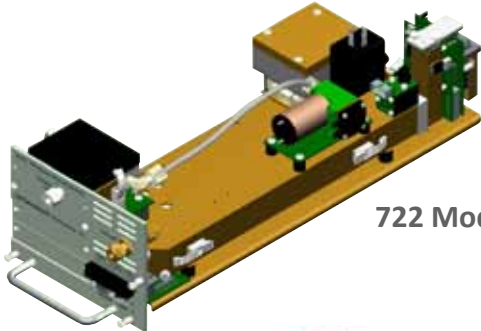
Tanabyte line of Easy-To-Operate Photometric Ozone Analyzers and Calibrators are designed as direct replacements for the industry standard Dasibi 1008 Series. The Analyzers and Calibrators exceeds the performance specifications of the Dasibi 1008 series while incorporating modern, advanced features. All Tanabyte instruments are available as either a portable SA1 type or rack-mountable SA2 type, depending on the application needs. The SA1 Enclosure type supports one module and requires a minimal amount of bench space. In addition, its lightweight and rugged design is ideal for field auditors and traveling service personnel. The SA2 Enclosure type supports one or two Modules and is rack or bench mountable. Its 5¼" (same as Dasibi) height requires less rack space than similar instruments on the market, which are typically 7" or higher. The Tanabyte instruments shares many common components with the Dasibi Model 1008 series and inherits the Dasibi type "Dot Commands" protocol from the Dasibi Model 5008. The Audit Analog Input allows the Tanabyte calibrators to automatically generate Ozone Certification Reports.

Advantages and Features

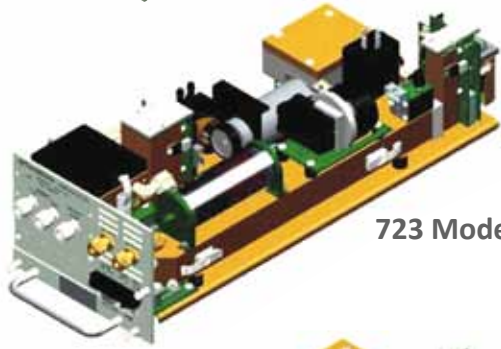
- U.S. E.P.A Equivalent Method Designation EQOA-0407-165
- Direct Replacements for the Dasibi 1008 series of ozone analyzers and ozone calibrators (including same physical dimensions).
- Utilizes the UV Photometric Measurement Technique, temperature and pressure correction.
- Tanabyte invented Dual USEPA Approved instruments combinations, for economical and engineering solutions.
- Superior performing Tanabyte designed Ozone Generator, producing the most accurate-stable-repeatable ozone even at very low concentrations
- Tanabyte designed Audit Analog Input to certify another ozone analyzer.
- New smaller and light weight design (less than 20 Lbs), ideal for station monitoring, field auditors, QA Lab operators, and mobile air monitoring. Lowest instrument height profile of only 5.25 inches, rack space saving.
- Data storage, diagnostics, alarms, selectable units, RS232, Dasibi Dot Commands, Programmable Calibration Levels and Sequences.
- The modular design simplifies maintenance. By using an extension cable, the module can be decoupled and operated outside the SA1 and SA2 enclosure for easy servicing.

Ozone Analyzer and Ozone Calibrator

All Tanabyte Ozone Analyzers and Ozone Calibrators incorporate a module with a precision USEPA Approved ozone photometer employing State-of-the Art Ultraviolet Absorption Technique. In addition, the calibrator modules include ozone generators for photometer feedback, to facilitate the calibration of the internal photometer, and to calibrate external ozone analyzers. With the Audit Analog Input feature the calibrating of external analyzers can be automated thus requiring minimal operator supervision.



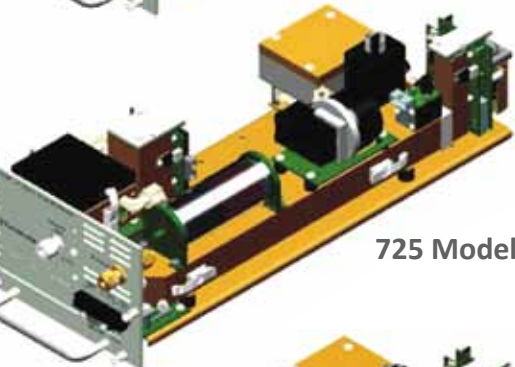
722 Model



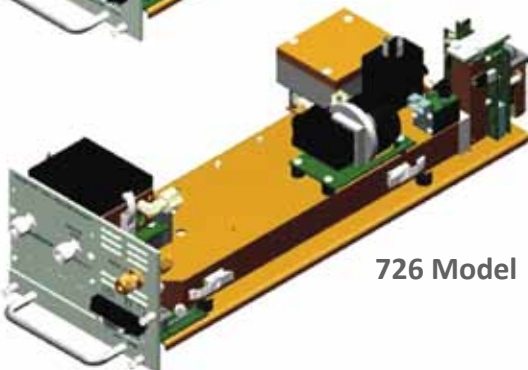
723 Model



724 Model

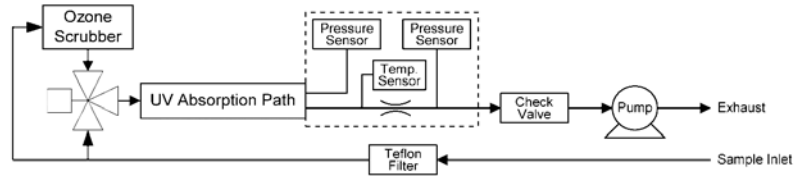


725 Model

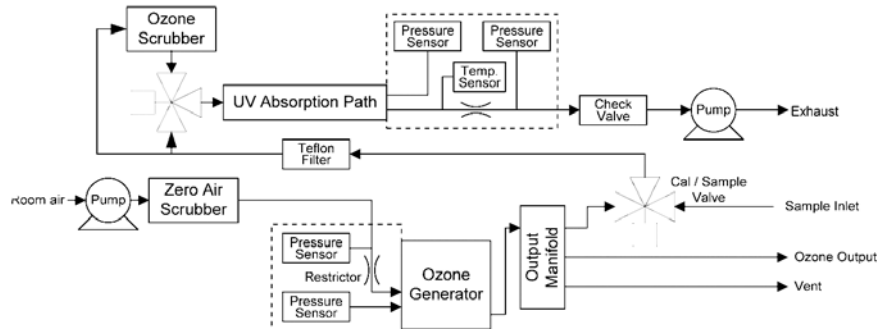


726 Model

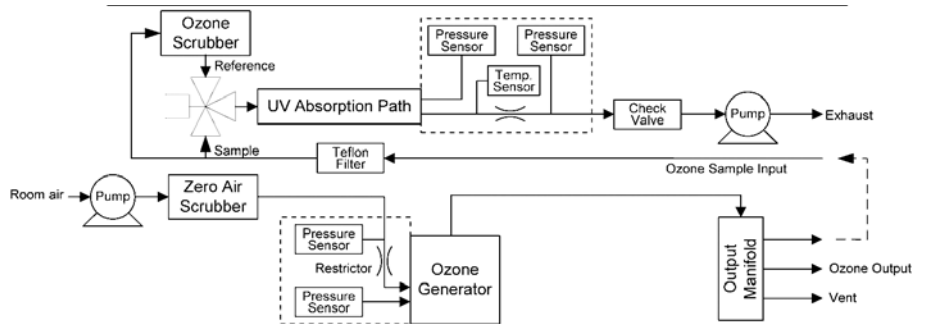
722 Ambient Ozone Module



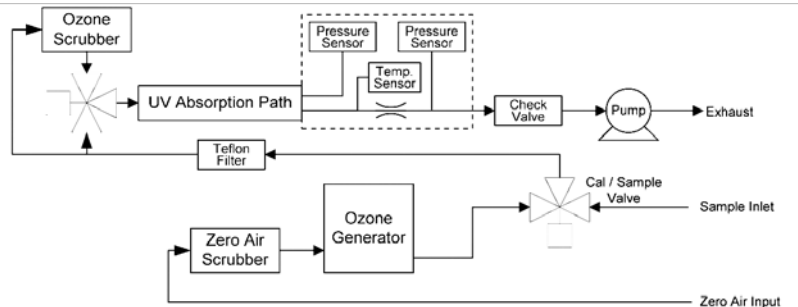
723 O3 Transfer Standard w/Cal-Sample Valves Modules



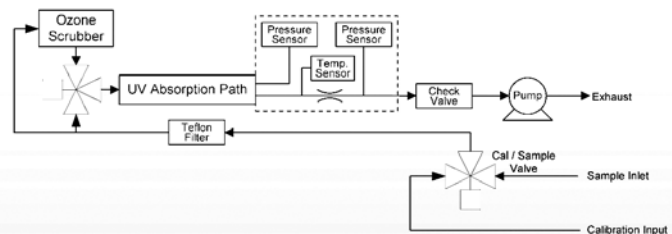
724 Ozone Transfer Standard Module



725 Ozone Analyzer w/Internal Zero-Span Module



726 Ozone Analyzer w/Cal-Sample Valves Module



Configurations

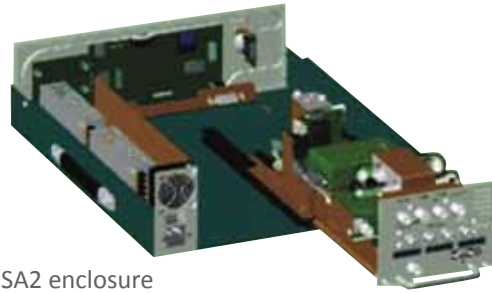
Tanabyte Ozone Analyzers and Calibrators comprise of two main sections, the analyzer or calibrator modules and the SA1 or SA2 enclosures. When one enclosure and one or two modules are coupled together they become one Analyzer or Calibrator. Tanabyte offers two types of enclosures, the SA1 enclosure which support one module and the SA2 enclosure which can supports one or two modules. The SA1 is very versatile, durable, and light weight with a small foot print of only 8" wide and is classified as our portable-bench mounting version. The SA2 has the conventional width of 17" wide to fit instrument racks and can be configured for bench mounting or rack mounting and has a height of only 5.25 " (same as Dasibi Model 1008 series) to economize space in instrument racks.

Ozone Analyzer and Ozone Calibrator Model Numbers

SA1-722	Ozone Analyzer
SA1-723	Ozone Transfer Standard with Cal Sample Valves
SA1-724	Ozone Transfer Standard
SA1-725	Ozone Analyzer with Internal Zero Span
SA1-726	Ozone Analyzer with Cal - Sample Valves
SA1-734	Ozone Primary Standard
SA2-722	Ozone Analyzer
SA2-723	Ozone Transfer Standard with Cal Sample Valves
SA2-724	Ozone Transfer Standard
SA2-725	Ozone Analyzer with Internal Zero Span
SA2-726	Ozone Analyzer with Cal - Sample Valves
SA2-734	Ozone Primary Standard
SA2-722-722	Ozone Analyzer and Ozone Analyzer Combination
SA2-722-723	Ozone Analyzer and Ozone Transfer Standard Combination
SA2-722-724	Ozone Analyzer and Ozone Transfer Standard Combination
SA2-726-724	Ozone Analyzer and Ozone Transfer Standard Combination
Other Instrument Combinations are available upon request	

Physical Specifications

The SA1 enclosure supports one module



SA2 enclosure with one module



SA2 enclosure with two modules

SA1 Calibrator Dimension	8.1" W x 9" H x 23.4" L
Weight	SA1-722 = 19 Lbs SA1-723 = 26 Lbs SA1-724 = 24 Lbs SA1-725 = 22 Lbs SA1-726 = 20 Lbs SA1-734 = 23 Lbs
SA2 Dimensions	17" W x 5.25" H x 21" L
Weight	SA2-722 = 22 Lbs SA2-723 = 29 Lbs SA2-724 = 27 Lbs SA2-725 = 25 Lbs SA2-726 = 23 Lbs SA2-734 = 26 Lbs SA2-722-722 = 32 Lbs SA2-722-724 = 36 Lbs
Environmental Specifications	
Operating Temperature	5° to 45°C
Humidity	0 to 90%, non-condensing

Ozone Analyzer and Ozone Calibrator Specifications

Ozone Photometer	
Measurement Range	0-500 PPM, 0-1000 PPB 0-10 PPM, or auto-ranging
Sample Flow Rate	Adjustable 0.5 to 2.0 LPM
Zero Noise	< 0.3 PPB
Span Noise (above 100 PPB)	< 0.5% of reading
Lower Detectable Limit (LDL)	< 0.5 PPB
Precision	< 0.5% of reading
Linearity	< 1% of full scale
Zero Drift	< .001 PPM per month
Span Drift (per 24 hours)	Less than 1% of reading
Lag / Rise / Fall Times (with fast cycle setting)	10 / 20 / 20 seconds
Resolution	0.1 PPB
Ozone Generator	
Ozone Generator Range	0-1500 PPB
Minimum Non-Zero Ozone Output	1 PPB
Ozone Output Resolution	0.5 PPB
Ozone Output Linearity	+/- 1% of range
Zero Air Flow Rate	5 to 7 LPM
Zero Air Pollutant Concentrations	< 1 PPB O3, NO, NO2, H2S, SO2, Hydrocarbons

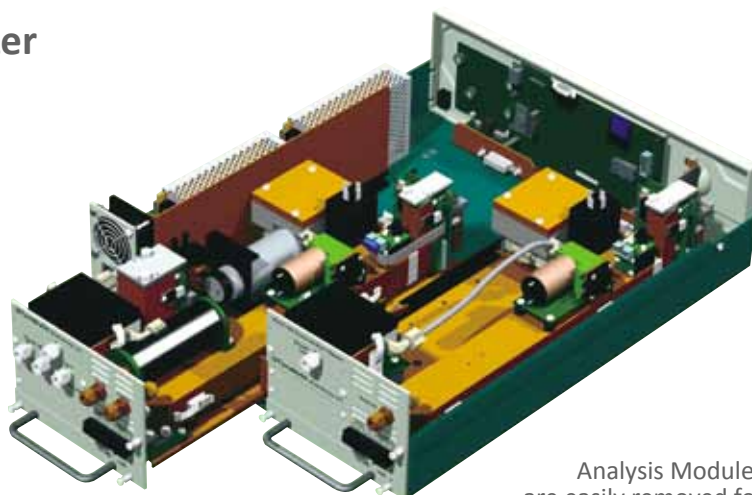
Analog Outputs	
Number of Analog Outputs	3
Analog Output Full Scale Ranges	100 mV to 10 V (Independently Selectable)
Analog Output Resolution	16 Bits
Digital I/Os	
Number of Digital I/Os	4
Status input voltage range	0 - 5 VDC TTL
Control output voltage range	0 - 5 VDC
Number of Isolated Relay Outputs	2 (722 -724)
Relay Contact Output Voltage Range	24 VDC
Digital Ports	
RS232 Ports	2 (9Db)
Ethernet (Optional)	1 (RJ45)
Analog Input	
Number of Analog Inputs	1
Analog Input Range	0 - 1 VDC
Power	
AC Input	90 to 264 VAC, 50 or 60 Hz

The Model SA2-722-724 Ozone Analyzer and Ozone Transfer Standard

shown in a SA2 enclosure with the top removed

Instrument Combinations

- Cost effective solution
- Space saving solution to crowded instrument racks by having two instruments in one enclosure
- Split screen display



Analysis Modules are easily removed for calibration and service

Contact Benchmark Monitoring for more information:

M: +(614) 0166 6077
F: +(612) 4938 2076
P: +(612) 4016 8589

E: sales@benchmarkmonitoring.com.au
W: www.benchmarkmonitoring.com.au

A: U5 / 17 Enterprise Crescent, McDougalls Hill NSW 2330 Australia