

The Tanabyte 72x Series of Photometric Ozone Analyzers

Precision instruments for the measurement and calibration of ozone

The Model 724 Transfer Standard, in a Portable Docking Station



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



The Model 722/724 Combo, enclosed in a Dual Docking Station

Tanabyte is proud to present the 72x Series of Photometric Ozone Analyzers and Calibrators. Designed as direct replacements for the popular, but discontinued Dasibi 1008 Series, the 72x Series exceeds the performance specs of the Dasibi 1008 while incorporating modern, advanced features.

All variants of the Model 72x Series are available as self-contained "Modules" that can be plugged into either portable bench or rack-mounted "Docking Stations", depending on the application needs.

The Portable Docking Station requires a minimal amount of bench space for locations with tight space constraints. In addition, its lightweight, rugged design is ideal for field auditors and traveling service personnel.

The Dual Docking Station supports one or two Modules in a rack mountable enclosure. Its 5¼" height requires less rack space than similar instruments on the market, which are typically 7" or higher.

Standard Features:

- U.S. E.P.A Equivalent Method Designation EQOA-0407-165
- Replacements for the Dasibi 1008 series of ozone analyzers/calibrators
- Utilizes the UV Photometric Measurement Technique
- Automatic temperature and pressure correction
- Advanced microprocessor diagnostics assure optimal operation
- Internal non-volatile data acquisition and storage
- Color graphic display with high contrast, wide viewing angle and large digits
- Easy-to-use menu system and intuitive Graphical User Interface
- I/O card slots support a variety of networking and data acquisition options
- The modular design simplifies maintenance and service

* Designated by the U.S. E.P.A as an Equivalent Method for the measurement of ozone in the atmosphere (EQOA-0407-165)

 **Tanabyte**
Engineering, Inc.

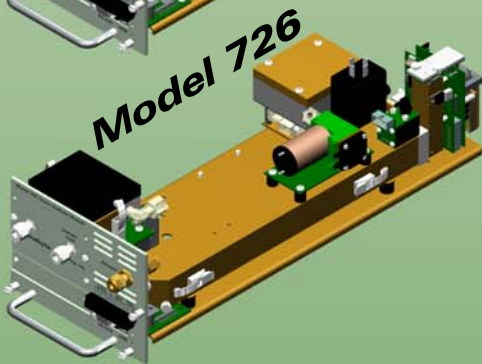
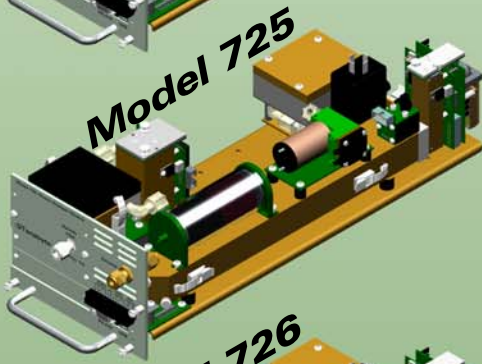
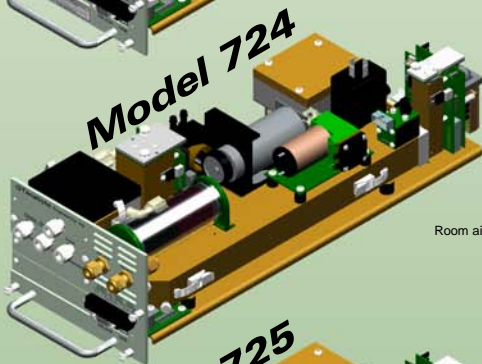
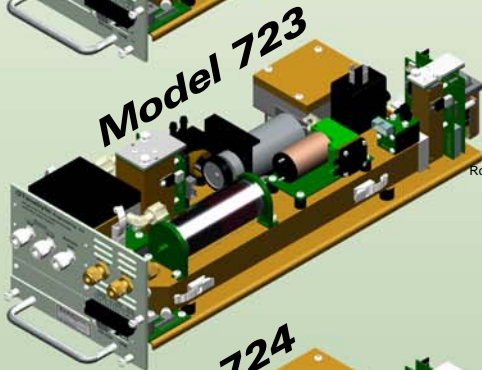
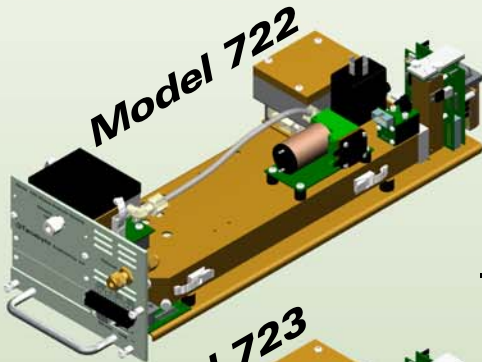
www.tanabyte.com

Email: sales@tanabyte.com

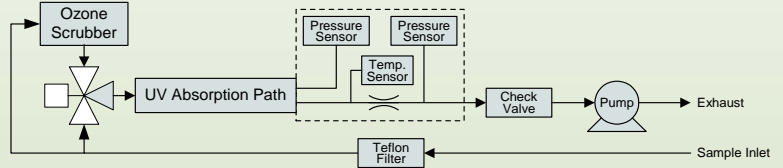
V090612

Selecting Analysis / Calibration Modules

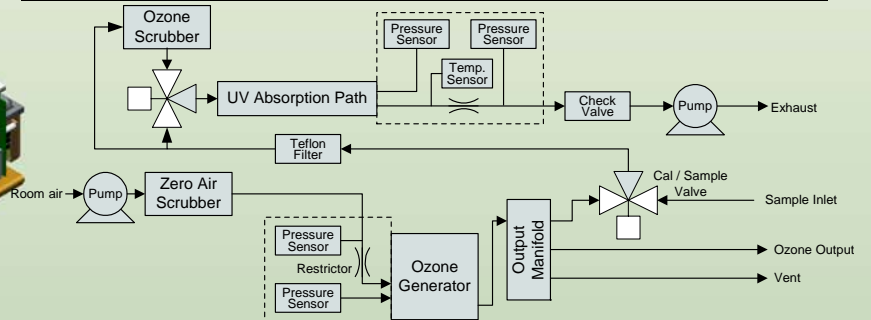
All Modules in the Model 72x Series include a precision ozone photometer with an inlet filter and ozone scrubber. In addition, some modules include options for calibrating the internal photometer and/or external ozone analyzers.



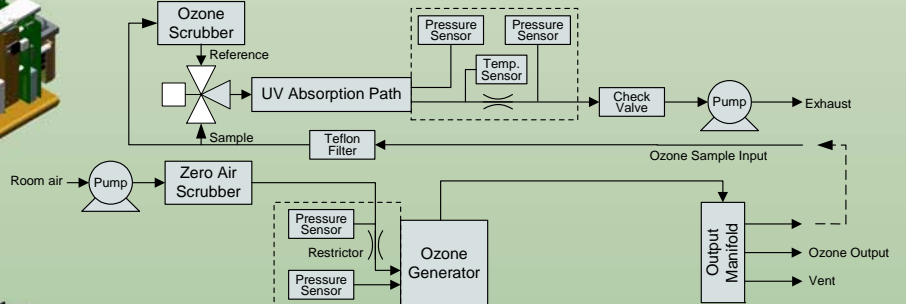
Ambient Ozone Analyzer



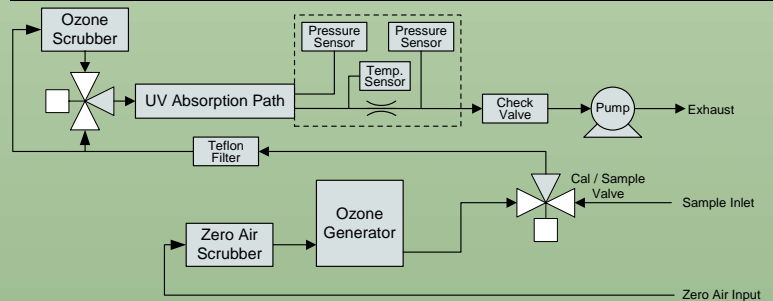
Transfer Standard with Cal-Sample Valves



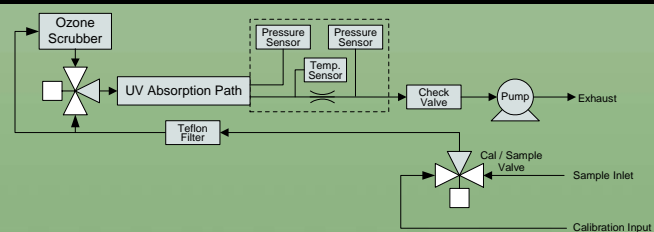
Ozone Transfer Standard



Ozone Analyzer with Internal Zero Span



Ozone Analyzer with Cal-Sample Valves

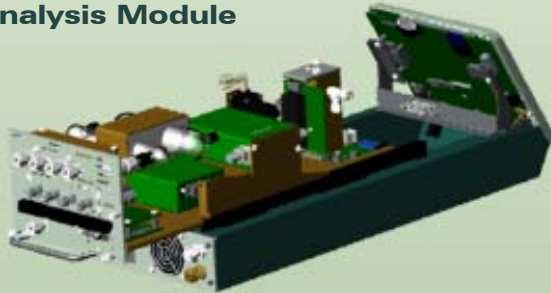


Selecting a Docking Station

Though Tanabyte analysis and calibration modules represent complete, self-contained systems, autonomously performing their designated gas analysis or calibration functions, they require an enclosure, DC power and some means of retrieving data and interacting with the modules. Docking Stations provide all these functions in addition to other services, such as ventilation and networking.

At the present time, Tanabyte offers two Docking Stations, primarily distinguished by the number of Docking Ports supported. The Portable Docking Station is designed not only to be rugged and reliable for portable applications, but also requires very little space for bench-top applications. The Dual Docking Station may be bench mounted or rack mounted, requiring only 5¼" of rack space.

The Portable Docking Station supports any Calibration or Analysis Module



Docking Station Common Features

- Universal power supply operates from 90-264 VAC at 50 or 60 Hz.
- Color TFT display supports a graphical user interface that is easy to learn and use.
- Keypad with raised keys and tactile response
- SD Memory Card, removable from the front, for data and setup storage
- Optional Ethernet and USB ports for connection to a network or PC *

*Contact Tanabyte for availability

Docking Station Specifications

Physical Specifications

Dual Docking Station:

17" Wide x 5.25" High x 21" Deep (432 x 133 x 533 mm)
Empty Weight - one power supply: 12 lb (5.4 kg)
- two power supplies: 13.5 lb (6.1 kg)

Portable Docking Station:

8.1" Wide x 9" High x 23.4" Deep (206 x 228 x 594 mm)
Empty Weight: 9 lb (4 kg)

Environmental Specifications

Operating Temperature: 5° to 45°C
Humidity: 0 to 90%, non-condensing
Power Requirements: 90 to 264 VAC, 50 or 60 Hz,

What is a Docking Station?

A Docking Station is a rugged enclosure designed to provide Docking Ports for one or more Tanabyte modules. In addition to enclosing the modules, a Docking Station has the following features:

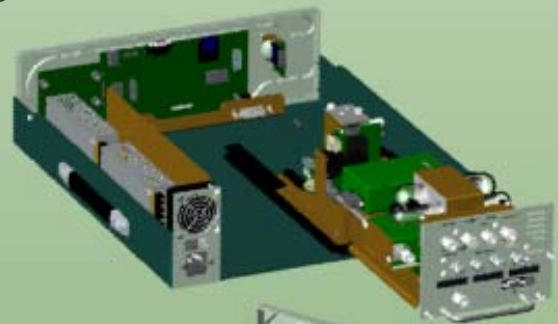
- Docking Ports for one or more modules
- A User Interface for controlling and monitoring the modules
- Power Supplies
- Ventilation
- Network Connections
- Data storage

What is a Docking Port?

A Docking Port is a plug-in slot designed to accept any 7" wide analysis or calibration module manufactured by Tanabyte. Each Docking Port consists of two slides, captive nuts to secure the module in place and a docking connector to provide power and communications to the module when plugged in.

The Dual Docking Station Can support ...

One ...



... Or Two

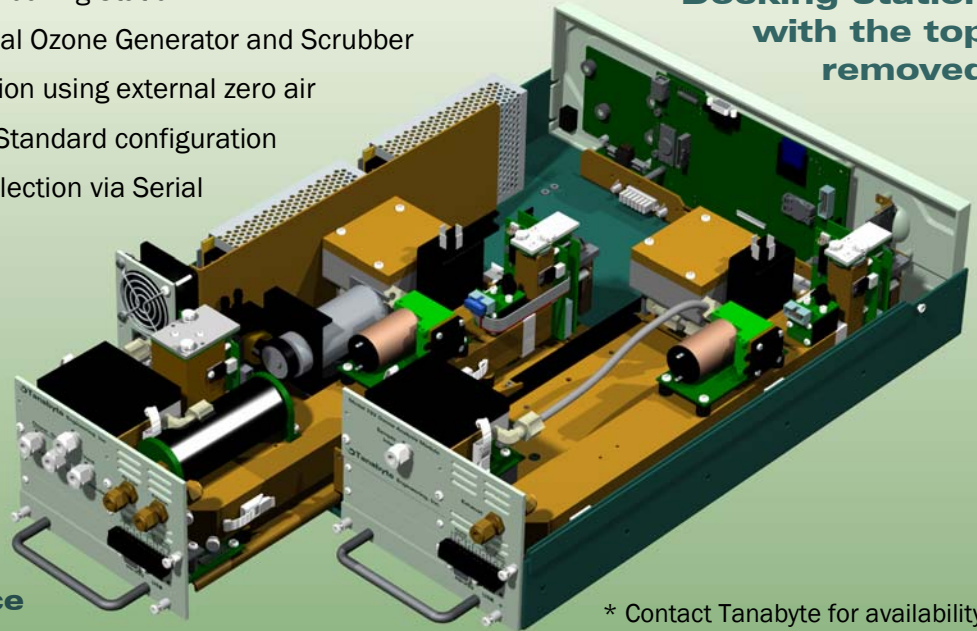
Calibration or Analysis Modules



Options:

- Single or Dual Docking Station
- Rack Mounting Kit for Dual Docking Station
- Zero-Span option with Internal Ozone Generator and Scrubber
- Primary Standard configuration using external zero air
- Ozone Calibrator / Transfer Standard configuration
- Remote control and data collection via Serial RS-232, USB or modem
- Internet connectivity via modem or Ethernet*

The Model 722 Ozone Analyzer Module with a Model 724 Ozone Transfer Standard shown in a Dual Docking Station with the top removed



**Analysis Modules
are easily removed
for calibration & service**

* Contact Tanabyte for availability

SPECIFICATIONS

Module Specifications:

Power Standard:	+5V, +/-15V, +24V at less than 80 Watts
12V Option	9-16V at less than 7 amps
Dimensions:	7" wide x 4.9" high x 19.5" long (178 x 124.5 x 495 mm)
Module Weights:	
Models 722 & 726:	9 lb (4 kg)
Models 723 & 724:	12½ lb (5.7 kg)
Models 725 & 734:	10 lb (4.5 kg)
Typical Analyzer Weights:	
722 in Portable Docking Station:	18 lb (8 kg)
724 in Portable Docking Station:	21½ lb (8 kg)
722 in Dual Docking Station:	21 lb (9.5 kg)
722/724 in Dual Docking Station:	35 lb (15.9 kg)

Ozone Photometer Specifications:

Analog outputs:	4 isolated 16-bit outputs with ±100 mV to ±10V independently selectable ranges
Full Scale Range:	0-500 PPB, 0-1000 PPB, 0-10 PPM or auto-ranging
Measurement Units:	PPB, PPM, ug/m ³ or mg/m ³
Sample Flow Rate:	.5 to 2.0 LPM, adjustable
Photometer Cycle Time:	3 to 20 seconds, adjustable
Zero Noise:	< 0.3 PPB
Span Noise:	< 0.5% of reading (above 100 PPB)
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	Less than 1% of reading per 24 hours
Lag / Rise / Fall Times	10 / 20 / 20 seconds, respectively (with fast cycle setting)

Calibration Options:

Ozone Output Range:	0 to 1000 PPB at 5 SLPM zero air flow, software selectable
Minimum Non-zero Ozone Output:	1 PPB
Ozone Output Resolution:	0.5 PPB
Ozone Output Linearity:	+/- 1% of range
Zero Air Flow Rate	2.5 to 6.5 LPM, software selectable (Models 723 & 724 only)
Zero Air Pollutant Concentrations:	NO, NO ₂ , H ₂ S, SO ₂ , O ₃ , Non-methane hydrocarbons < 1PPB