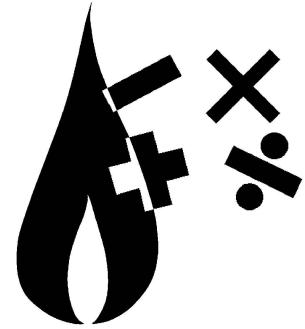


GASCalc™ 5.0

API



The GASCalc™ 5.0 software is complimented by an Application Programming Interface (API) which allows programmatic access to selected calculation routines and methods found in the software. The API allows the GASCalc routines to be embedded in third party or custom applications to create powerful solutions to serious calculation challenges.

Modules & Functions

The API is licensed on a module basis. The individual modules allow access to specific calculation methods and routines. The available modules are described in the following table:

Module	Function Description	Methods/Options
Compressibility	Provides access to the compressibility factor and density calculations.	<ul style="list-style-type: none"> • AGA NX19* • AGA 8 - 1985 • AGA 8 - 1992 • GERG 88* • GPSA* • GPA 2145-09*
Gas Loss	Provides access to the various routines associated with gas loss from damage.	
Gas Properties	Provides access to various gas property calculations including heating Value, Ideal and Real Specific Gravity, Ratio of Specific Heats, Dynamic/Absolute Viscosity, and Speed of Sound (non-AGA7) calculations.	Heating Value <ul style="list-style-type: none"> • AGA 8 • GPA 2172-86 • GPA 2172-09 • GPSA
		Ratio of Specific Heats <ul style="list-style-type: none"> • Gas Engineers Handbook • GPA
Meter	Provides access to various measurement related calculations including diaphragm, rotary, turbine, pulse, orifice, and vcone meter values, and various volume calculations.	<ul style="list-style-type: none"> • AGA 3 - 1985 • AGA 3 - 1992 • ISO - 5167 • McCrometer
Pipe Flow	Provides access to various calculations associated with flow through a pipe segment including pipe flow and pressure drop, equivalent length, and velocity calculations. All GASCalc supported pipe flow equations are accessible.	<ul style="list-style-type: none"> • Numerous Industry Equations
Regulator	Provides access to various to pressure and flow calculations for regulator and relief valve devices. Supports a variety of makes and models.	<ul style="list-style-type: none"> • API 520 • ASME BPV • ISA S75.1 • Numerous Industry Equations



Module	Function Description	Methods/Options
Sonic	Provides access to all speed of sound calculations	<ul style="list-style-type: none"> • AGA 7 2003 • Traditional Thermodynamic
Support	Provides access to various support calculations including dimensional unit conversions, temperature conversions, atmospheric pressure and average pressure calculations.	<ul style="list-style-type: none"> • ISHM • Handbook of Chemistry & Physics • AGA - Measurement • NOAA - 1976

API Interface Methods

Access to the API is provided through several types of dynamic link library (dll) interfaces. Through a standard "c" type dynamic link library, as a 32-bit ActiveX control, and as a 32-bit or 64-bit resource that can be used by the .Net framework.

Pricing

The API is licensed and priced on per module, per server basis. Discounts are available for multiple module, multiple licenses, and complete package purchases. The individual module costs are listed in the following table:

Module	Cost	Notes
Compressibility	\$2500	• <u>Requires</u> the Gas Properties module which is included at no additional charge.
Gas Properties	\$500	• Included with the Compressibility module at no additional charge.
Meter	\$2500	
Sonic	\$1000	• <u>Requires</u> the Compressibility module.
Support	\$500	• Included with the Compressibility, Meter, and Pipe modules at no additional charge.
Pipe Flow	\$2500	
Gas Loss	\$2500	• <u>Requires</u> the Pipe Flow module.
Regulator	\$2500	
<p>! All costs are USD ! A maintenance fee in the amount of 15% of the purchase cost is due on the annual anniversary of the license purchase.</p>		

Call us, or visit our website, www.b3pe.com for additional information...



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