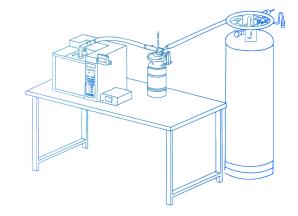
## ZX1 Thermal Modulator

For Agilent GC's



### FEATURES

- Consists of the following modules:
- Floor Dewar\*
- Bench Dewar
- Liquid Nitrogen Level Controller
- Programmable Logic Controller (PLC)
- Human-Machine Interface (HMI)
- Valve Assembly
- Top Plate Assembly
- Vacuum Insulated Transfer Line
- Head Clamp Assembly
- All cables, hoses, and assembly tools are supplied.

- Modulates nC6 nC30 routinely, and up to nC45 with cold jet flow control. \*\*
- Accommodates Two Parallel Column Sets ("two modulators for the price of one").
- Compatible with most commercially available GC systems.
- No moving parts. High reliability.
- Open in-oven construction. No modulation chamber.
- Effortless Modulator Tube Mounting.
- May be supplied turnkey with GC, or retrofitted onto user's GC.
- Users can self-install the system in as little as 2 hours.

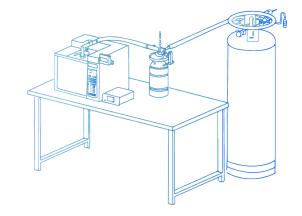
\* User-supplied.

\*\* Contact Zoex for more information.

**Notice:** Due to COVID-19 restrictions, user must install system in house. Installation requires approximately 1-2 hours. Detailed installation videos and phone support provided.

# **ZX1 Thermal Modulator**

For Agilent GC's



## SPECIFICATIONS

#### **GENERAL**

Two-stage loop modulation; one cold jet and one hot jet	-
No moving parts	-
Hot Jet Temperature	Up to 450 °C
Cold Jet Temperature	As low as -189 °C

Hot Jet Pulse Duration	Set range: 0 to 32 secs 375 ms typical
Modulation Period	Set range: 0 to 32 secs Recommended: 3 to 32 secs Note: Modulation Period should be greater than the Hot Jet Pulse Duration
Jet Gas Consumption (Dry N2)	25 SLM per jet max 10 to 15 SLM typical

#### CRYOGENIC COOLING SYSTEM

Liquid nitrogen heat exchange bath	-
Lowest cooling temperature	-189 °C (Measured 5 cm inside Cold Jet Nozzle)
Flexible Vacuum Insulated Transfer Line	36" (914 mm). Custom lengths available.
Bench Top Heat Exchange Dewar	5 Liter, 24" h (610 mm)

### AUTOMATIC LIQUID NITROGEN LEVEL CONTROLLER

Display	4.3" 24-bit color TFT display, 480 x 272 pixels Resistive touch screen
Dimensions	3.8" h x 8.4" w x 11.4" d (97 mm h x 213 mm w x 279 mm d)
Weight	3.3 lbs / 1.5 kg
Electrical	100-240 ± 10% VAC, 50- 60 Hz, 2.2 A Max