

UNITY 2™

CIA 8 Operators Manual

Version 1.0

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1. UNITY 2 – CIA 8 method

Once the software has been downloaded to the Air Server, the only operating mode available will be On Line Air and an on-line sampling method is displayed. The system is now ready for use with whole-air samples or for continuous on-line monitoring of air or gas streams.

On Line Air		Standby	
		<input checked="" type="checkbox"/> Split On	Flow Rate ml/min 10.0
Purge			
0.5	Prepurge Time	0.5	Trap Purge Time
		Flow Rate ml/min 50.0	
On Line Sampling			
		Sample Time	<input checked="" type="checkbox"/> Add Standard
		16.0	<input type="checkbox"/> Pump On
		Flow Rate ml/min	<input type="checkbox"/> Dryer On
		50.0	<input type="checkbox"/> Leak test
Trap Desorb			
Trap Low	Trap Hold	<input checked="" type="checkbox"/> Split On	
25	3.0		
Trap High	Trap Heating Rate °C/s	Split Flow ml/min	
300	40	5.0	
Flow Path Temp			
100			
GC Cycle Time			
0.1			
Minimum Carrier Pressure			
5.0			

Note: The '**Pump On**' check box has no function.

Note: Selection of '**Dryer On**' (for humid samples) by checking the appropriate box will only be effective if the appropriate option has been installed.

1.1. Internal Standard Addition

The internal standard gas is connected to the '**I.S. in**' 1/8" connector. The flow through the internal standard loop is controlled by the '**I.S. Flow Regulation**' needle valve.



The only additional option available in the method with the CIA 8 compared to the Airserver is the '**Add Standard**' check box. Enabling this option will mean during the '**Prepurge Time**' the 1 mL sample loop will be swept with internal standard at a flow rate determined by the '**IS flow regulation**' needle valve.

Once sampling begins the sample gas sweeps through the 1 mL sample loop carrying the internal standard onto UNITY 2.

1.2. Parameters for on-line mode methods

Options

Methods | Gas | **Sequence** | Ports | Configuration | Reporting | Miscellaneous

Sequence

☐ AirServer, wait for external ready before prepurge

☐ Use Dry Purge ☐ DryPurge/Standard

☐ Turn on Unty Tube Heater with AirServer

☐ Turn on Ultra Tube Heater

☐ Turn on Re-collection Tube Heater

Pre Trap-Fire Purge Time: 1.0

AirServer Post Leak Test Pressure Release Time: 0.3

Post Tube Desorb Pressure Release Time: 0.1

ASIS Purge Time: 0.0

OK

The options are identical to AirServer with the exception of:

CIA Purge Time : Determines the time the IS loop is purged during sampling. If left at zero the loop will be purged for the duration of the sampling time.