

Customer Support Note 024

Confirming ECC configuration

Disclaimer: It is vital that this Customer Support Note is read carefully before proceeding and that any instructions contained within the document are followed closely. Markes International will not accept responsibility for any damage done to instrumentation or personnel if any instructions within this document are not followed exactly. Any ongoing warranty or contract may be voided if failure to follow these instructions results in damage to the instrumentation. If anything is unclear, you must clarify the details with a Markes representative before proceeding.

TD systems can be set up in two configurations. Both UNITY (series 2 or 'xr') and TD100 (any version) can be set up in full ECC or T'd ECC. The configuration will depend on a number of factors including the supply of the carrier gas, the GC in use and the application.

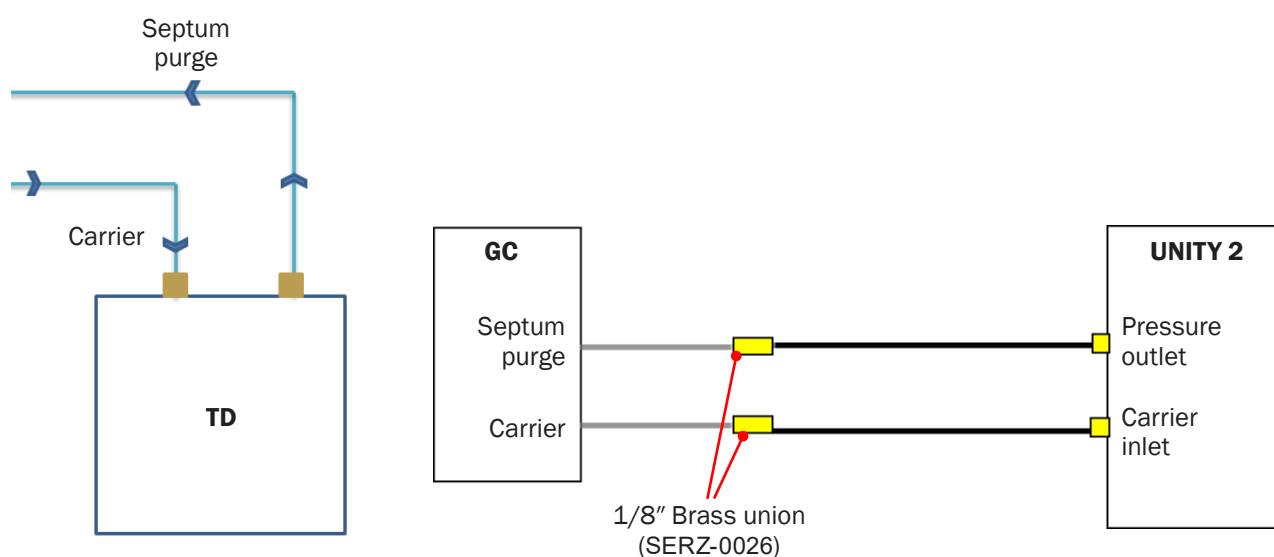
This document will explain how to determine the configuration of your instrument.

1. Full ECC

When viewing the TD instrument from the back, there will be three gas connections:

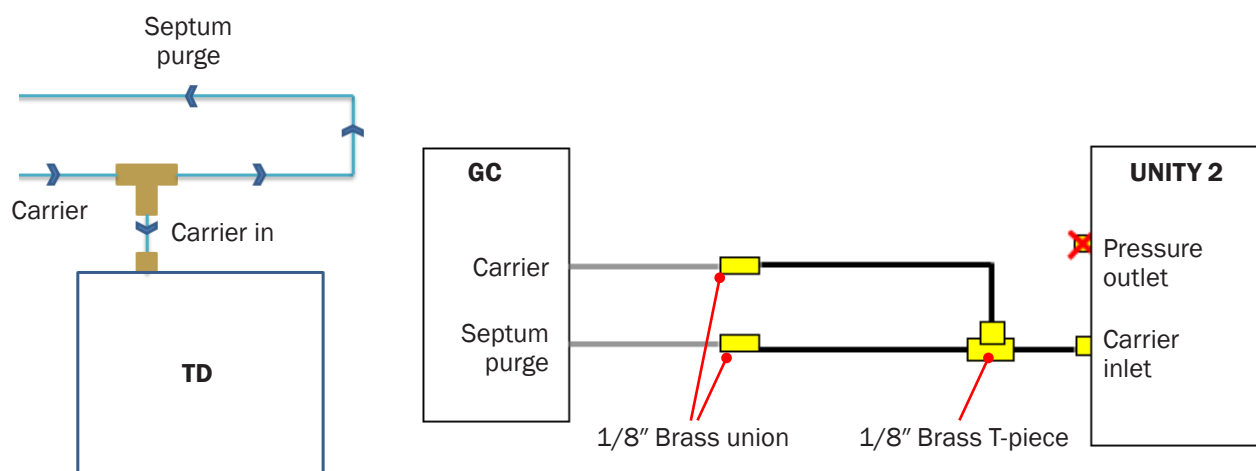


When the system is in 'Full ECC' both the carrier inlet and the pressure outlet will be connected as shown below:



2. T'd ECC

When the system is in T'd ECC, only the carrier inlet will be connected to a gas supply, as shown below:



3. Comparison

Full ECC Configuration	Alternate (T'd) ECC Configuration
Benefits	
Pressure controlled from GC and part of GC method.	Pressure controlled from GC and part of GC method.
Flow supplied to the system is continuously read out from ECC module total flow.	Flow supplied to the system is continuously read out from ECC module total flow.
Retention times independent of split flow, as required for RTL and DRS capabilities.	Allows system to run in constant flow and programmed pressure and flow modes.
Disadvantages	
Potential instability of carrier gas supply during trap desorption, ultimately leading to poor reproducibility. This makes constant-flow methods difficult to set up.	RTL and DRS capabilities not officially available because retention times will be affected by split flow (higher split flows will increase retention times).
	Requires a minor modification to the TD instrument's carrier gas supply plumbing

For more detailed information on setting up and confirming the correct set-up, consult QUI-1062.

For all technical support queries, please contact Markes International.

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