

Precursor Vapor Delivery Systems

EpiSource™ with SMR & MVS

<https://www.cerestechnologies.com/en/our-products>

EpiSource™ with SMR & MVS is a cascading bubbler system, designed to deliver TCS vapor to multi-chamber Epi process tools with precision vapor concentration under variable flow rate demand conditions. The vapor flow from an SMR self-refilling bubbler serves as the carrier gas to an MVS bubbler. With our patented temperature and pressure feedback control, this EpiSource™ system is ideal for on-demand supply of TCS vapor to multiple MFCs at a time. This EpiSource™ system is refilled from our ChemSource precursor liquid delivery system.

Why choose EpiSource™ with SMR & MVS ?

- On-demand vapor supply to multiple MFCs
- Configurable as bubbler or flash evaporator
- Supports long process runs that require continuous, steady state supply of vapor.
- Generates up to 250 gr/min SiCl₄ neat vapor
- Up to 20 slpm carrier gas bubbler vapor supply
- Proven, patented design over 25 years



Applications

EpiSource™ enables remote supply of vapor on demand to one or more MFCs, or process tools. EpiSource™ is an alternative to direct liquid injection vaporizers that are limited to supplying one point of use. EpiSource is best suited for liquid precursors less than 120o C, and less than 20 slpm vapor flow rate, whether binary or neat vapor, such as TCS and SiCl₄.

Features

- Cascade bubbler vapor delivery system
- Patented SMR & MVS vapor generators
- Patented vapor concentration control
- On-board maintenance circuits for push gas, purge gas, vent and vacuum functions
- Optional fire safety features for NFPA 79
- Liquid refill from a precursor delivery system