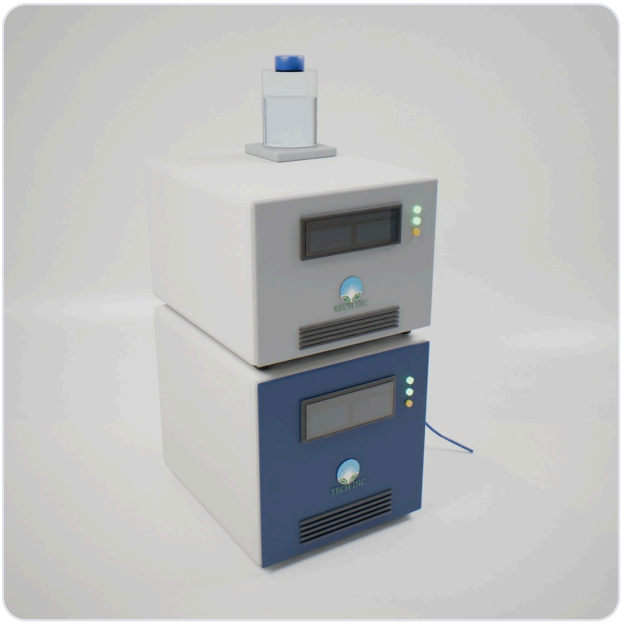
PRODUCT DATASHEET

GC Gas Station (Hydrogen and Zero Air)

Hydrogen and zero air for GC from one unit





DETAIL – CONTROL DISPLAY

OVERVIEW

The Tech Inc. GC Gas Station (model TI-GCS-300) supplies both gases that a gas chromatograph (GC) flame detector needs from a single unit: hydrogen from a PEM cell, and zero air, which is air with the hydrocarbons removed. It replaces hydrogen and air cylinders at the instrument with on-site generation from room air, deionised water and power.

MODELS AND CONFIGURATIONS

- **TI-GCS-300** – GC gas station supplying hydrogen and zero air.
- **Detector gas supply** – hydrogen fuel and zero air for one or more flame ionisation detectors.
- **Carrier and detector supply** – hydrogen as carrier gas as well, with output sized to suit.

TYPICAL DESIGN DATA

Gases supplied	Hydrogen and zero air
Hydrogen	PEM electrolysis from deionised water, with output sized to the GC duty
Zero air	Hydrocarbons removed by catalytic oxidation, with output sized to the detector duty
Outlet pressures	To the GC instrument specification
Utilities	Room air, deionised water and mains power to client specification
Safety	Hydrogen leak detection, pressure relief and automatic shut-down
Electrical safety	Designed to IEC 61010-1 or client specification
Service	Yearly service plan

APPLICATIONS

Flame ionisation detector fuel and air, hydrocarbon and refinery gas analysis, natural gas and LPG testing, environmental volatile organic compound (VOC) analysis, pharmaceutical residual solvents, and food and flavour laboratories.

KEY ADVANTAGES

- **Two gases, one unit** – one footprint, one power connection and one service visit
- **Clean detector air** – catalytic hydrocarbon removal keeps the detector baseline low
- **No cylinders** – hydrogen and air made on demand at the instrument
- **Built-in safety** – leak detection and automatic shut-down on the hydrogen side
- **Yearly service plan** – preventive maintenance included with every station

Designed and built by Tech Inc. · **Part of the Davey Group since 1990**

Offices: Chennai · Toronto · Tallinn · Al Khobar

mail@techincresearch.com · +1 (289) 622-1032 · www.techincresearch.com

Disclaimer: All products, designs and content are the property of Tech Inc. Tech Inc. reserves the right to change specifications and details without notice. Images are for representation only; the supplied equipment may differ in appearance. Data are typical; final design to client specification.