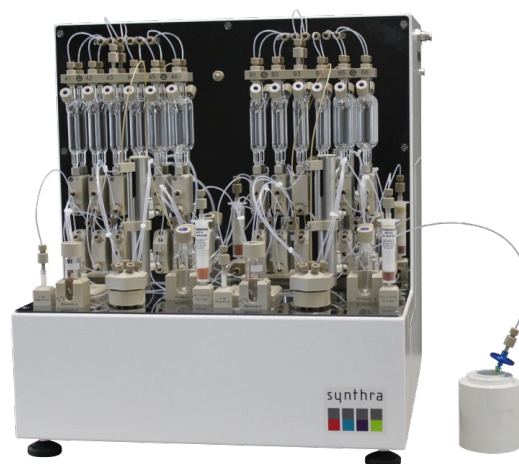


## Synthra FDGtwo (Catalog No. 001)

Synthra FDGtwo is a flexible and completely automated radio synthesis system for routine production of [ $^{18}\text{F}$ ]FDG as well as of [ $^{18}\text{F}$ ]fluorine-labeled compounds like [ $^{18}\text{F}$ ]FMISO, [ $^{18}\text{F}$ ]FLT or [ $^{18}\text{F}$ ]FCh by nucleophilic substitution. The hereby used Synthra FDG IV and Synthra FDG V cartridges have been utilized more than 200,000 times worldwide over the past 24 years. Automating the synthesis is simple with the easy-to-use configuration software SynthraView. The Synthra FDGtwo module offers both, fully automatic and manual modes of operation.

### [ $^{18}\text{F}$ ]Labeling Possibilities

- ✓ **Synthesis of [ $^{18}\text{F}$ ]FDG:**
  - Two independent sets of a single synthesis unit enables **two [ $^{18}\text{F}$ ]FDG productions with one setup.**
  - Allows up to 4 FDG synthesis a day
- ✓ **The radio synthesis system has a dedicated sub system for the recovery and collection of [ $^{18}\text{O}$ ]H $_2$ O for the purification of the cyclotron produced [ $^{18}\text{F}$ ]fluoride.**
- ✓ **The target activity is measured with a separated detector.**



### General Features

- ✓ **Heating and Cooling Capabilities**
  - 2 heating zones with cooling capabilities
  - Temperature range: 25 °C – 250 °C
- ✓ **Detectors and Controllers**
  - 6 shielded radiation detectors
  - 2 Pressure sensors
- ✓ **Build-in vacuum pump** (<5 mbar)
- ✓ **Liquid nitrogen trap** for radioactive volatiles and to protect the vacuum pump
- ✓ **Dispensers and Valves**
  - HR-dispenser (up to 50.000 steps, 5 mL) for operating of the self-cleaning system
  - Chemically inert valves with small dead volume < 35  $\mu\text{L}$ , 5 bar rated
- ✓ **Self-Cleaning System**

- ✓ **12 reagent vials**
  - Eight small (1 – 3 mL) and four large (10 – 15 mL) volume glass vials for reagents
- ✓ **Synthesis Options:**
  - ➔ Product vial heater option (Catalog No. 000ph)

### GMP Features

- ✓ Synthesis files for [ $^{18}\text{F}$ ]FDG
- ✓ **GMP compliant.** Electronic control and data collection (27/18 channels)
- ✓ **21CFRpart11** & **LIMS** compatible

### Terminal Control

- ✓ **A Laptop (Win 10 Pro) and SynthraView are included**

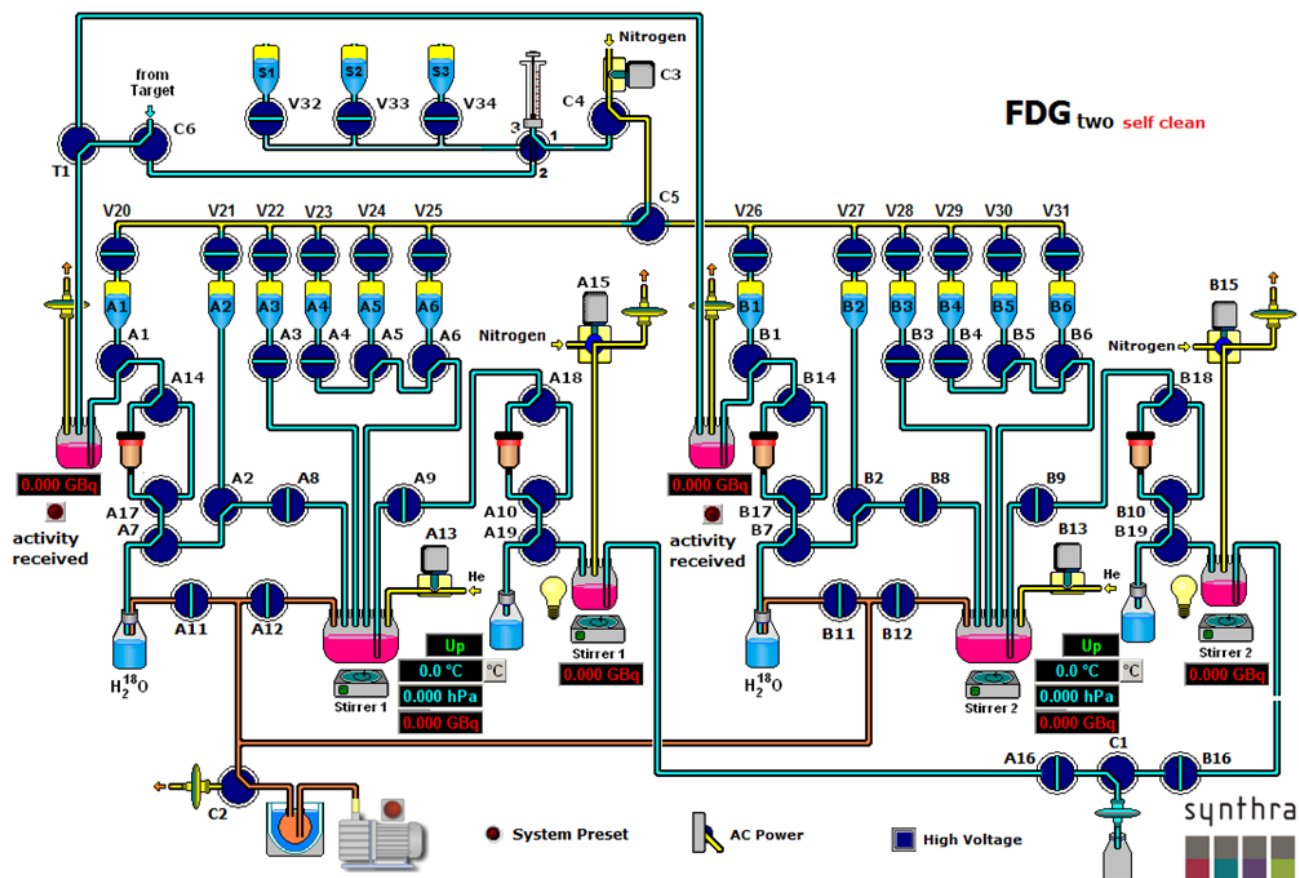
### Synthesis Features

- ✓ Two glassy carbon reaction vessels (11 mL)
- ✓ Two independent [ $^{18}\text{F}$ ]fluoride separation cartridge
- ✓ Two independent [ $^{18}\text{F}$ ]FDG purification cartridge

# Synthra F-18 Family

## Product Description and Technical Specifications

synthra



The Graphical User Interface (GUI) of the SynthraView software