



# The Fourier 80 CTC PAL RSI

• It may be small...but it is mighty

In collaboration with our external partner CTC, the Fourier 80 can now be operated with an industry standard, state-of-the-art PAL RSI sample robot, making NMR spectroscopy easier and faster than ever.

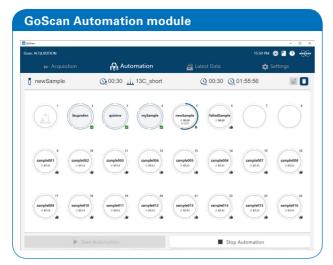
With 60 sample positions, the Fourier 80 can now be run continuously all day, overnight, or even over a weekend. To maximize efficiency, the PAL RSI sample robot can be upgraded to a total of 132 sample positions allowing for 24/7 operation of the Fourier 80 with minimal hands-on time.

Since the samples are stored in racks, open shop access is possible, meaning multiple labs can share one Fourier 80.

This results in more results... faster.

## **Key Benefits:**

- Robust and reliable
- High sample-throughput
- Non-expert operation
- Flexibility



The rack view allows for easy orientation and gives a summarized status overview of all sample positions.

## **High Sample Throughput**

For automation, the NMR tubes are stored in racks with 24 positions each. This eliminates the need for individual sample holders and tube adjustments, saving time, preventing errors, and allowing for open shop access.

An additional provided reference sample rack holds both Bruker and customer standard samples used for routine checks like the daily shimming of the system.

A capacity range of 48 up to 120 samples and the quick sample exchange times maximize throughput, ensuring you get the most out of your Fourier 80. Both standard 5 mm O.D., 7" long NMR tubes and flame-sealed tubes can be used in the PAL RSI sample robot.

### **Non-expert operation**

GoScan is a very intuitive software interface, which helps the inexperienced user to set up and acquire experiments on the Fourier 80. Therefore, we have expanded the GoScan features to also cover automation. You can define experiments for each individual position, copy settings from one position to any other and, of course, all features known from manual mode also apply to the automation module. Able to operate in several languages, GoScan allows you to control the sample changer with a simple touch of a button and automatically exports your data to TopSpin, Mnova or any defined location.

## **Flexibility**

The sample changer itself is operated with the pushbutton GoScan software solution, but you still have the option of using our industry-leading TopSpin software for full flexibility in the setup of individual experiments. You decide whether to use TopSpin or GoScan – or both!

#### **Robust and Reliable**

To ensure the reliability of the setup, even when used with 132 samples for a long period of time, we ran more than 100,000 successful test cycles. With that, we are proud to offer the most robust automation solution in the FT-NMR benchtop segment to increase reliability and efficiency in NMR measurements.

Technical Specifications	
Sample Changer Operation SW:	Perpetual upgrade license from the Bruker GoScan Automation module
Sample Capacity:	2 sample racks (24 positions each)
Reference Sample Capacity:	1 reference sample rack (12 positions)
Upgrade Options:	3 additional sample racks (24 positions each)
Sample Tubes:	5 mm O.D., 7"long NMRtubes, 600 ul sample volume (~40 mm filling height); flame-saled tubes possible
Dimensions:	~123 cm x 128 cm x 79 cm (H/W/D)
Weight:	~30 kg
Input Voltage: GoScan Languages:	110 V/ 230 V English, Spanish, Portuguese, German, French, Italian, Russian, Chinese, Japanese, Korean, Arabic