

# CAMAG AUTOMATIC TLC SAMPLER 4



The CAMAG Automatic TLC Sampler 4 (ATS 4) offers fully automatic sample application for qualitative and quantitative analyses as well as for preparative separations. It is suited for routine use and especially a high sample throughput. Automatic sample application is a key factor for productivity of the HPTLC laboratory. The requirements for an instrument serving this purpose, i.e. precision, robustness during routine use and convenient handling are fully met by the CAMAG ATS 4.

## Key features

- Fully automatic sample application, suitable for routine
- Application in the form of spots, bands or rectangles
- Application of sample volumes between 0.1 and 5  $\mu\text{L}$  by contact transfer
- Spray-on application of sample volumes between 0.5 and  $> 100 \mu\text{L}$
- Data input and monitoring with visionCATS software

WORLD LEADER IN  
PLANAR CHROMATOGRAPHY

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# SETTING NEW STANDARDS IN PLANAR CHROMATOGRAPHY

With the CAMAG ATS 4, samples are either applied as spots through contact transfer (0.1–5 µL), bands or rectangles (0.5 to > 100 µL) using the spray-on technique. Starting zones sprayed on as narrow bands offer the best separation attainable with a given chromatographic system. Application in the form of rectangles allows precise application of large volumes without damaging the layer.

The CAMAG ATS 4 utilizes special syringes 10, 25 or 100 µL with fixed or detachable needles. There are different needles available for contact and spray-on application. Syringes with detachable needle offer the advantage that a damaged needle can be easily replaced. However, these syringes demand close monitoring of tightness of the connection between needle and syringe. Syringes with fixed needle offer higher reliability and thus more convenient handling, i.e. in conjunction with instrument qualification. In case of damage to the needle the complete syringe has thus to be replaced.

The CAMAG ATS 4 allows «overspotting», i.e. a sequential application from different vials onto the same position. This technique can be used e.g. for prechromatographic derivatization, spiking, etc.

## Software-controlled with visionCATS

The CAMAG ATS 4 is controlled by visionCATS HPTLC software. The easy-to-navigate user interface guides effectively through the chromatographic process – from definition of samples and substances to reporting of results. The software organizes the workflow of HPTLC, controls the involved CAMAG instruments, and manages data. Software-controlled with visionCATS the ATS 4 allows to rapidly enter all data on sample sequence, plate dimensions, number and distance of tracks, designation, and sample volumes.



### Heated Spray Nozzle for ATS 4

Heating at 60 °C cuts the time required for the application of aqueous solutions about in half. This is useful e.g. for trace analysis where comparatively large sample volumes have to be applied in order to reach a low detection limit.

| Tr. | Vial ID | Description    | Vol. (µl) | Position | Type      | SST                      |
|-----|---------|----------------|-----------|----------|-----------|--------------------------|
| 1   | S0001   | Plant sample 1 | 3.0       | A1       | Sample    | <input type="checkbox"/> |
| 2   | S0001   | Plant sample 1 | 4.0       | A1       | Sample    | <input type="checkbox"/> |
| 3   | S0001   | Plant sample 1 | 5.0       | A1       | Sample    | <input type="checkbox"/> |
| 4   | R0001   | Reference a    | 2.0       | F1       | Reference | <input type="checkbox"/> |
| 5   | R0002   | Reference b    | 2.0       | F2       | Reference | <input type="checkbox"/> |
| 6   | S0002   | Plant sample 2 | 4.0       | A2       | Sample    | <input type="checkbox"/> |
| 7   | S0003   | Plant sample 3 | 4.0       | A3       | Sample    | <input type="checkbox"/> |
| 8   | S0004   | Plant sample 4 | 4.0       | A4       | Sample    | <input type="checkbox"/> |
| 9   | S0005   | Plant sample 5 | 4.0       | A5       | Sample    | <input type="checkbox"/> |
| 10  | S0006   | Plant sample 6 | 4.0       | A6       | Sample    | <input type="checkbox"/> |
| 11  |         |                |           |          |           | <input type="checkbox"/> |
| 12  |         |                |           |          |           | <input type="checkbox"/> |
| 13  |         |                |           |          |           | <input type="checkbox"/> |
| 14  |         |                |           |          |           | <input type="checkbox"/> |
| 15  |         |                |           |          |           | <input type="checkbox"/> |

### Sequence table

Samples, standards, volume and vial positions are defined in a sequence table.

## Ordering Information

### 022.7410 CAMAG® Automatic TLC Sampler 4 (ATS 4)

with heated spray nozzle for fully automatic application of samples as spots, bands or rectangles including overspotting in qualitative and quantitative TLC/HPTLC analysis. Complete with instrument cover, sample rack for 66 standard 2 mL vials. Without dosage syringe, 90 - 230 V

### 022.7450 Dosing syringe starter kit containing

695.0053 25 µL Dosing syringe for ATS 4 without needle  
695.0046 Needle for spray-on application  
695.0047 Needle for contact application

### 028.0000 CAMAG® HPTLC Software visionCATS: Basic Version

Including access and control of all instruments - one server, one client; Instrument Diagnostics (xQ); analytical reports and access to HPTLC Method Library. Basic Version is not included in any Ultimate Package and needs to be purchased separately.

Before installing visionCATS, please visit [www.camag.com/visionCATS](http://www.camag.com/visionCATS) for recommended system requirements and further information.

#### CAMAG (Switzerland)

Sonnenmattstrasse 11  
4132 Muttenz  
+41 61 467 34 34  
info@camag.com

#### CAMAG (Germany)

Bismarckstrasse 27-29  
12169 Berlin  
+49 30 516 555 0  
infoberlin@camag.com

#### CAMAG Scientific (USA)

515 Cornelius Harnett Drive  
Wilmington, NC 28401  
(800) 334 3909  
tlc@camag.com

