# CAMAG®
# TLC Scanner 4

The TLC Scanner 4 is the most advanced workstation for densitometric evaluation of TLC/HPTLC chromatograms and other planar objects.


SWISS MADE

The TLC Scanner 4 is a scanning densitometer. It measures the reflection of separated compounds in absorbance and/or fluorescence mode. Controlled by *visionCATS* software, the TLC Scanner 4 enables quantitative evaluation of the generated densitometric data. The spectral range of light from 190 to 900 nm is available for selecting single or multiple wavelengths for scanning densitometry. Detection can thus be fine-tuned to match the spectral properties of the analyte to its optimized specificity and sensitivity of the detection.

## Key features

- Measurement of reflection, either in absorbance and/or fluorescence
- Spectral range from 190 to 900 nm
- Data step resolution 25–200 µm
- Spectrum recording up to 100 nm/s
- Any plate format up to 20 x 20 cm
- Software-controlled by *visionCATS*

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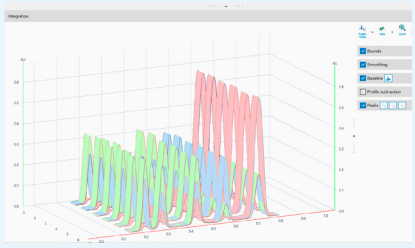
# QUANTITATIVE EVALUATION WITH *visionCATS*

*visionCATS* controls all functions of the TLC Scanner 4 and enables quantitative evaluation of the generated densitometric data. Only positioning of the object to be measured is performed manually and, if desired, switching on the internal illumination to assist correct positioning. Optimal settings of the electronic amplification are automatically selected for scanning in absorbance and/or fluorescence mode respectively. The 16 bit A/D converter ensures optimally adapted resolution of the measurement signal.

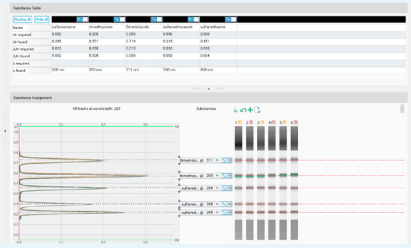
To determine the substance concentration in a sample, five different quantification functions (*e.g.* linear and polynomial) are available. Several scanning steps (*e.g.* scanning the plate after development and scanning the same plate after derivatization) and up to five different evaluations can be performed (with data obtained from single wavelength, multiple wavelengths or a combination of measurements in absorption and fluorescence detection mode).

## The Scanner Ultimate Package:

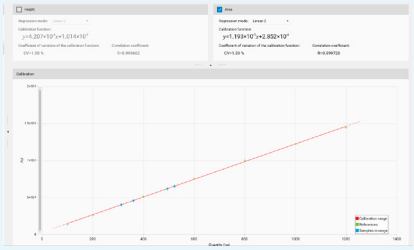
- **Multi Wavelength Scan:** this feature offers the possibility to perform a multi-wavelength scan with up to 31 selected wavelengths or a combination of measurements in absorption and fluorescence detection mode.
- **Scanner Quantification**: this feature allows to quantify each individual substance on the plate. Five different quantification functions are available for evaluation to determine the concentration of the substance in a sample. In one analysis file up to five evaluation steps can be performed in multiple plate states (*e.g.* plate after development and same plate after derivatization).
- **Spectrum Scan**: this feature includes the measurement of the spectrum of each individual substance on the plate including the evaluation of the substance purity by comparison with reference standard.



Densitograms are displayed in 3D, top or front view. Several peak integration and baseline correction settings can be selected.



The separated compounds are assigned. For quantification, data from the multi-wavelength scan at the optimum wavelength for each compound is used.



For evaluation the best fitting calibration model is used. Quantitation can be done via peak height or area.

## Ordering Information

027.6200 **CAMAG® TLC Scanner 4**
for the densitometric evaluation of TLC/HPTLC plates, spectral range 190 to 900 nm, plate sizes up to 20 x 20 cm, absorbence and fluorescence mode, CAMAG *visionCATS* controlled.

028.0000 **CAMAG® HPTLC Software *visionCATS* Basic Version**
including access and control of all instruments - one server, one client, Instrument Diagnostics (xQ), analytical reports, access to Method Library.
Needs to be purchased separately and is not included in any Ultimate Package.

028.3000 **CAMAG® HPTLC Software *visionCATS*: Scanner Ultimate Package**
Multi Wavelength Scan, Spectrum Scan and Quantification.
CAMAG HPTLC Software *visionCATS* Basic Version (028.0000) needs to be purchased separately.

Before installing *visionCATS*, please visit 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