

**TRS100**

Quantitative Analysis for tablets,  
capsules and powders





# TRS100

## Content Uniformity Redefined

Cobalt Light Systems' TRS100 transmission Raman system is the next generation in real-time non-destructive content uniformity measurement. Simple to use, the TRS100's automated analysis replaces laborious HPLC-based methods for solid dosage forms. Easier to implement than other spectroscopic techniques, Cobalt's transmission Raman technology simplifies method-development for routine quality control.

The TRS100 allows rapid, accurate quantitative analysis of tablets, capsules, powders and other dosage forms with no sample preparation. Intact tablets or capsules are loaded on to a flexible sample-handling system and individually scanned by our transmission Raman system in less than one second per sample. This spectroscopic technique allows quantitative determination of single or multiple actives in one rapid measurement.

With results in seconds, not minutes or even hours, Cobalt's TRS100 reduces testing resource to decrease release time and improve product quality.

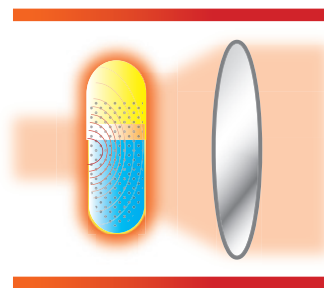
## Transmission Raman Technology

Cobalt's TRS100 harnesses the spectroscopic power of Raman with the analytical power of whole unit-dose analysis. Being less sensitive to product variations, such as particle size and compaction, transmission Raman spectroscopy\* (TRS) penetrates most tablet coatings and capsule shells and samples the entire volume of the product for a more reliable assay. TRS analysis minimises method development effort and provides the best possible limit-of-detection, accuracy and precision for a non destructive spectroscopic method.

- Easy-to-build lean calibration models
- Works through capsule shells, coatings and plastic or glass containers
- No sample preparation or user-dependent operations
- API's, excipients, polymorphs and other crystalline forms

\*For peer-reviewed reference articles see

[www.cobaltlight.com/publications/journals](http://www.cobaltlight.com/publications/journals)





## Automated Analysis

The TRS100 testing system is a completely automated content uniformity instrument. Once the tray is inserted the process is controlled in software with no further user interaction. As each sample is individually analysed, statistics about content batch uniformity and process variation are visualised immediately and reported automatically in a QC-friendly report.

**EASY  
TO  
SET-UP  
AND  
USE**



**INSERT  
TRAY**

**SELECT  
TEST**

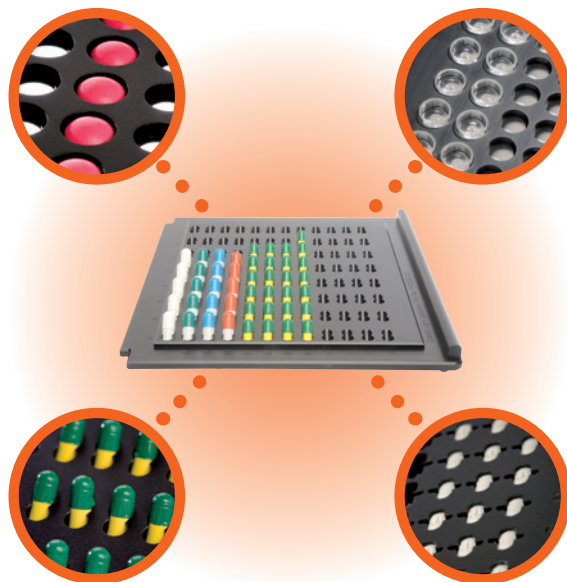
**RESULT  
REPORTED**

**Flexible and repeatable**  
sample presentation ensures  
the best analytical precision.

## ContentQC

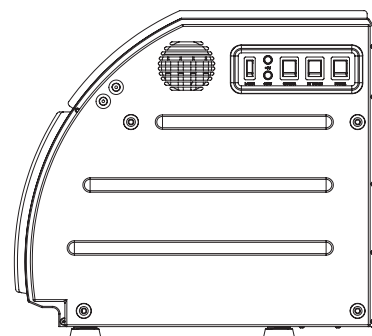
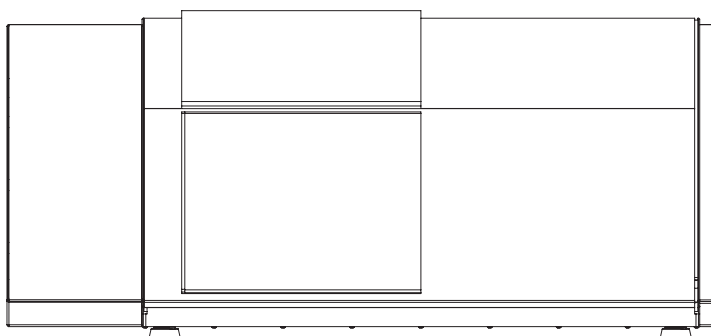
The TRS100 includes Cobalt's bespoke routine analysis software ContentQC. ContentQC is a fully integrated tool for pharmaceutical analysis and complies with the FDA's 21CFR part 11 regulatory guidelines. It provides a simple but powerful user interface for measurement, analysis, audit-trail recording and reporting.

- Built-in chemometric analysis suite
- Flexible user permissions control
- Secure audit trail database with LIMS interfacing
- Built-in reporting tools



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## Quantitative Analysis for tablets, capsules and powders



Dimensions: 1124 mm wide / 521 mm high / 575 mm deep

### Safety

- Class 1 laser system – interlocked
- CE marked

### Power requirements

- 90-264VAC 50-60Hz

### Software

- 21CFR 11 compliant
- ERES records compliant
- Integrated method development and routine protocols

### Hardware

- Dedicated transmission Raman platform built to GAMP 5 guidelines

### Sample trays

- 300cm<sup>2</sup> active sample area

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