

## AKTA (UNICORN) – GE Healthcare

### INTRODUCTION

The Lumetics LINK™ software platform scans network locations for new measurement data files, copies data directly to a centralized database, and provides a powerful user interface for rapid multi-measurement multi-technique data aggregation, visualization, analysis, and reporting. LINK employs a client/server-based architecture where the LINK server hardware is provided by the end user and resides on the end user’s network. The LINK client is a portable web-based application that may be placed on any computer with network connectivity to the LINK server. For successful import, the LINK webserver requires read access to the folders where user data resides.

AKTA pure is a versatile automated liquid chromatography system for the fast purification of proteins, peptides, nucleic acids, and other biomolecules to microgram to gram levels.

### DETAILS

LINK requires the CSV Export or XLS file to import AKTA data into the LINK software. The Curve File (ASC) and Documentation File (ASC) are optional. These files need to be exported from the UNICORN control software. LINK will observe the CSV Export or XLS file first and retrieve Sample Name from the File Name. The ASC file contains metadata, which will be imported, and LINK will also look for any corresponding ASC curve files.

A new LINKdb field will be dynamically created called “Measurement Type” to allow individual curves to be plotted on a single chart. The y-axis units included in this field are:

- DeltaC Pressure (MPa)
- PreC Pressure (MPa)
- UV (mAU)
- UV 1\_280 (mAU)
- UV\_CUT\_TEMP@100,BASEM (mAU)
- Cond (mS/cm)
- Conc B (%)
- Logbook
- Fraction

#### Helpful Notes:

- For valid ASC, CSV, XLS files:
  - Row two must contain Fraction and Run Log or Logbook as column headers
  - Other than Fraction and Logbook, the values in the columns MUST be numeric. if not, those curve data will not be imported.
- For valid Description File (ASC)
  - This file must start with the word ‘UNICORN’
  - Scan the **Run Log** section at the bottom of the file to find the link between .asc files. This is determined by the first logbook value in an asc file.

The AKTA ASC file example is as follows:

```
Chrom.1      Chrom.1      Chrom.1      Chrom.1      Chrom.1      Chrom.1      Chrom.1
UV 1_280     Cond         Conc B       Fraction     Run Log      PreC pressure DeltaC pressure
mL          mAU         mS/cm ml     %           ml          Fraction    ml          Logbook     m1          MPa         m1          MPa
0           0.001340055 0           2.135528    0           0           0           "Out-Waste" 0           "Manual Run 9/26/2013 1:14:02 PM -05:00 Result: /DefaultHome/1638491 (Manual)/Manual Run 001 User Default
0.01      -0.2212307 0.01      2.138417    0.048 0       369.9106    "Frac"      0           "Column position By-pass Down flow (Issued) (Manual)" 0.048 0.02053106 0.048 0.001991935
0.019    -0.2214935 0.019    2.138488    0.097 0       369.9106    "Out-Waste" 0           "Inlet A A2 (Issued) (Manual)" 0.097 0.02266166 0.097 0.00226696
```

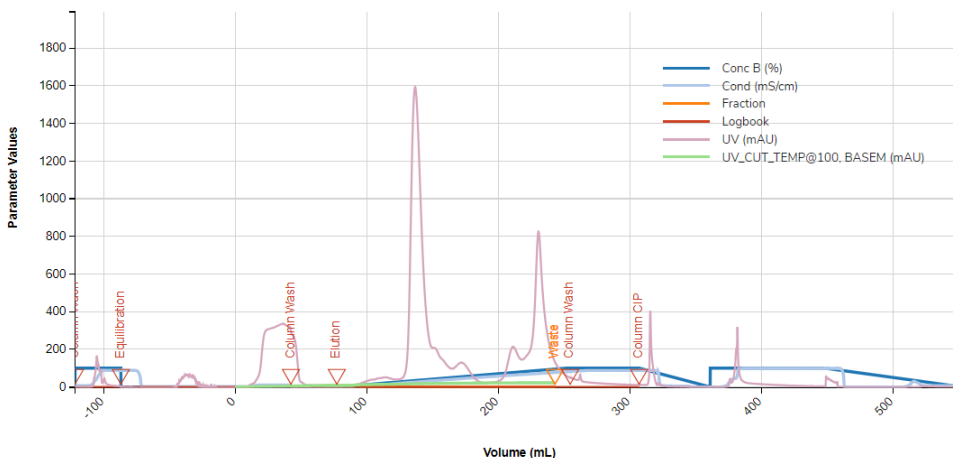


## EXAMPLES

Included below is a sample dashboard from Antaris measurement files:

### 1. Line Chart plotting raw data curves for Parameter Values vs. Volume and split by Measurement Type

Process Parameter Curves



### 2. Tabular Summary examples:

Measurement Summary Table – Measurement Results

Sample Name	Measurement Type	Sum (0-100 ml)	Sum (100-200 ml)	Sum (≥ 200)
GCQ FRACTION10 CSV.csv	Conc B (%)	5,395	148,845	661,899
GCQ FRACTION10 CSV.csv	Cond (mS/cm)	19,754	145,803	822,348
GCQ FRACTION10 CSV.csv	Fraction	0	0	0
GCQ FRACTION10 CSV.csv	Logbook	0	0	0
GCQ FRACTION10 CSV.csv	UV (mAU)	413,447	942,992	698,219
GCQ FRACTION10 CSV.csv	UV_CUT_TEMP@100,B	25,898	79,589	41,452

## AKTA DASHBOARDS

LINK contains an extensive built-in dashboard library from LINK version 2.4.0.210401 and later. This function contains specific pre-created dashboards for all instruments and application groups.

## CONTACT LUMETICS

For direct assistance, please contact Lumetics LINK™ Support:

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