

# ULTRA X 3011 ULTRA X 3011D Moisture analyser



To determine the moisture content in almost all liquid, solid and paste-like materials.

The principle is:  
drying with simultaneous

Suitable for use in operations directly in production facilities and laboratories.



Almost 70 years of experience with modern technology forms the basis for the ULTRA X moisture analyser. Precision weighing technology, simple operation, good functionality and design and a robust structure are combined in a practice-oriented manner.

## Operating



Weigh the sample, pivot the radiator above it, the measurement starts automatically and ends when the weight is constant. All of the parameters can be changed in the menu using three buttons. The menu is shown in the LC display.

The radiation temperature can be set. In addition to the moisture and solid material, additional measurement parameters can also optionally be displayed. The moisture content can be determined using a timer or the **automatic cut-out**. Three criteria are **individually** set for the automatic cut-out depending on the product properties: query start, weight reduction and query interval.

The measurement result remains on the display until the device is next used.

The reusable stainless steel sample dishes mean an ongoing cost saving.

## ULTRA X 3011D moisture analyser

The ULTRA X 3011 can optionally be delivered with or without a **built-in printer**.

The printout of all data is carried out in line with **GLP**. Intermediate values can be printed out at selectable intervals as needed.

All of the data are also output via the serial **RS 232** interface and **USB**.

The printer can be switched off.



# Technical Data

## ULTRA X 3011 / ULTRA X 3011D

### Balance:

|                |                         |
|----------------|-------------------------|
| weighing range | 210 g                   |
| resolution     | 0.001 g                 |
| sample volume  | max. 95 cm <sup>3</sup> |
| drying bowl    | 110 mm diameter         |



### For Moisture measuring:

|                       |   |
|-----------------------|---|
| sample weight         | any, recommended minimum 4 g  |
| power of heater       | 250 watts   |
| automatic             | automatic drying until weight constant selectable in 3 different modes:<br>start measuring, measuring in intervals, weight loss/ measured during intervals. |
| timer                 | 1 - 180 minutes   |
| temperature           | selectable from 40 °C up to 180 °C  |
| measured values       | % moisture<br>% dry mass<br>% moisture ad actual sample weight<br>g solids per kg   |
| measuring accuracy    | 0.01%   |
| device identification | <b>4-digit ID for identifying the device</b>  |
| menu lock             | the menu to prevent accidental changes to drying parameters<br>cal function is further available.   |

### Communication:

|              |  |
|--------------|--|
| data output  | interface V24 RS 232   |
| data signals | all weight and measuring data in GLP-format with start time and variable interval print out<br>selectable date, time, total measuring time, type of sample |

with **Software ULTRA X DataChannel** to transfer on PC as .xls data to Microsoft Excel,  
.html date,  
.xml date and  
.txt date.

### For using:

|                |   |
|----------------|---|
| power supply   | 230 V 20%/ + 15 %<br>48 63 Hz             |
| power consump. | 275 VA                                    |
| dimensions     | approx. l 385 x w 275 x h 420 mm over all |
| weight         | approx. 8.5 kg                            |

### Accessories:

Part no:

Using:

|                                  |         |   |
|----------------------------------|---------|---|
| stainless-steel drying tray      | 1000282 | sample tongs (2 sets supplied with the device)  |
| tray tongs                       | 1000230 | for lifting the tray (supplied with the device) |
| power cable                      | 1000190 | power supply (supplied with the device)         |
| calibration weight F1 200 g      | 1000403 | for calibrating the balance                     |
| aluminium foils 130 mm x 0.01 mm | 1000016 | for lining the drying tray                      |
| aluminium foils 130 mm x 0.03 mm | 1000017 | for lining the drying tray                      |
| foil press                       | 1000062 | for shaping the aluminium foil                  |



### Consumables:

|   |         |                        |
|---|---------|------------------------|
| paper for printer 58 mm                     | 1000234 | for integrated printer |
| durable 10 years, according to manufacturer |         |                        |
| infrared heater                             | 1000130 | sparepart              |

subject to technical modification



**a & p instruments e.K.**

Inh. Peter Ukena

Albert-Schweitzer-Straße 16, D-32758 Detmold,

Tel. +49 (0)5232 9778-0, Fax +49 (0)5232 9778-20

Internet: [www.apinstruments.de](http://www.apinstruments.de), Email: [info@apinstruments.de](mailto:info@apinstruments.de)