

## Thermal Conductivity Measuring Device C-ISO 300-01

ISO 8301

### Specification

<b>Measuring procedure</b>	heat flow meter method according ISO 8301, ASTM C 518, DIN EN 1946-3, EN 12664, EN 12667, EN 12939
<b>Measuring range</b>	in dependence of sample thickness 0.005 – 0.5 W/m·K
<b>Sample dimensions</b>	thickness in dependence of thermal conductivity 20–80 mm w x d: 100 x 100 – 300 x 300 mm
<b>Mean sample temperature</b>	in dependence of sample thickness and thermal conductivity of the sample 0°C - 60°C
<b>Measuring inaccuracy</b>	typically $\pm 1,0\%$ (max. $\pm 5\%$ , according ISO 8301)
<b>Reproducibility</b>	typically $\pm 0,5\%$ (max. $\pm 1\%$ , according ISO 8301)
<b>Heating /cooling plates</b>	aluminium, black elox, 300 x 300 mm
<b>Temperature control</b>	Peltier units with air / air heat exchangers heat flow bidirectional possible
<b>Heat flow meters</b>	2 pcs, measuring area: 100 x 100 mm
<b>Plate lifting unit</b>	linear lifting function, electro motoric with velocity regulation
<b>Measurement of thickness</b>	digital, 0 – 120 mm, resolution 0,1 mm
<b>Measurement of pressure</b>	digital, 0 – 500 N, resolution 1 N
<b>Display</b>	7" 800 x 480 wide Touch Screen
<b>Software</b>	SBC, Windows <sup>®</sup> Embedded CE 7.0, Lambda 2012 CE
<b>Operation / Display</b>	- lifting speed
<b>Touch screen</b>	- pressure of the measuring plate - plate distance - start / stop measurement - measuring results
<b>Interfaces</b>	1x RS232, 2x USB, 1x Fast Ethernet
<b>Sample entry</b>	from forwards (insulated sample door)
<b>Construction</b>	desktop device Housing stainless steel powder-coats, High-quality thermal isolation PE Sample door stainless steel brushed with magnet locking
<b>Operating conditions</b>	temperature +18 °C to +24 °C, relative humidity 5% to 65%
<b>Dimensions</b>	(W x D x H) 537 x 560 x 617 mm
<b>Weight</b>	72 kg
<b>Power supply</b>	230 V, 50 Hz, max. 430 W or 110 V/60Hz
<b>Options</b>	1. PC software Lambda 2012, 2. USB – connection cable, 3. Notebook, 4. PC, 5. printer

