

CTS2

Accurate thickness measurement of engineered tissues and cells



Features

- Non-contact
- Measure thickness in-situ
- Measurements can be performed in solution or in air
- Thickness measurements in less than 1 second
- 30 - 900 μm measurement range
- Sub micrometre resolution
- Continuous scanning for real time monitoring
- Applicable to collagen, hydrogels and many other engineered tissues and cells

Description

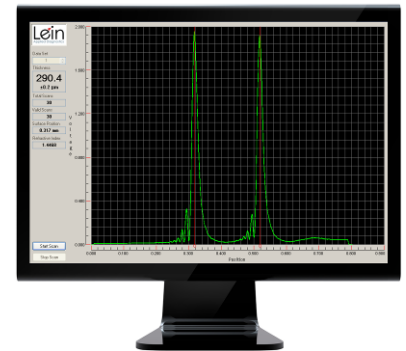
The CTS2 is an accurate non-contact thickness measurement system designed to measure engineered tissues and cells. The CTS2 can measure tissues and cells within a well plate and can make measurements in either solution or air. Measurements can be made in less than 1 second with sub micrometre resolution over a range of 30 – 900 μm . The CTS2 also features a well plate template so the sample under test can be accurately positioned. Lein's thickness measurement software, pControl, is also provided.

Technical

Parameter	Min	Typ	Max	Unit
Measurement Range	30		900	μm
Spatial Resolution		0.2		μm
Precision		± 1		μm
Accuracy		± 5		μm
Measurement Rate	5		30	Scans/s
Wavelength		1310		nm
ADC Resolution		16		bit
Full Scale SNR		0.1		%
Operating Temperature	0		45	$^{\circ}\text{C}$

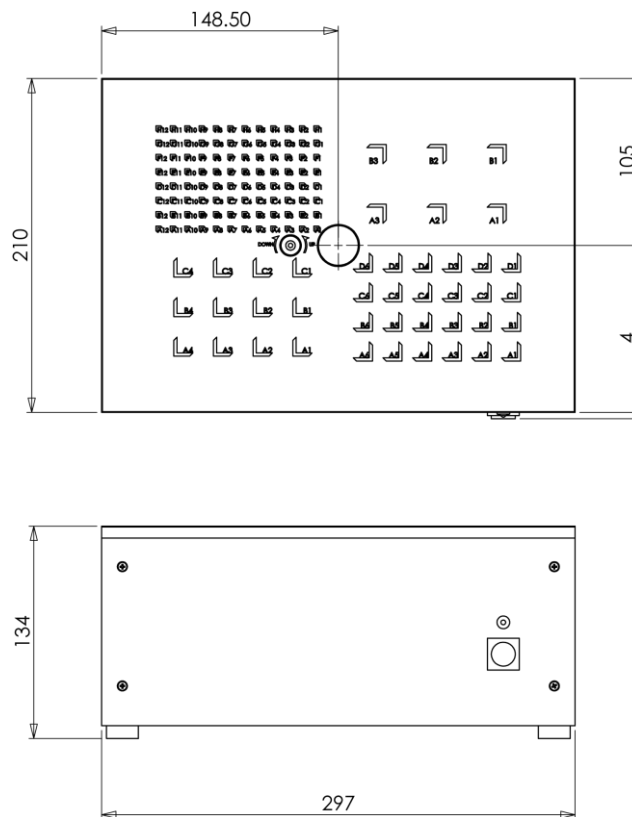
pControl System Requirements

- Minimum Processor: Pentium 4 2Ghz
- Minimum Graphics: DX9 compatible or later with 128MB of GRAM.
- Minimum Resolution: 1024x768
- Minimum RAM: 1GB
- Hard Drive Space: 10MB
- Operating System: Windows XP SP2 or Later, Windows 7 with .NET framework 3.5 or later.



The operating PC must have a free USB 2.0 port.

Mechanical



Warnings



Lein Applied Diagnostics Ltd reserves the right to update and improve this specification without prior notice.

Issue	01
Date	19/07/2013