

ICon

Compact position and multi-layer thickness optical measurement system

Features

- Non-contact
- 30 Hz scan rate
- 1310 nm, other wavelengths available
- Resolution of 0.9 μm , ICon model
- Range of optical configurations available
- Can be customised and embedded into your application
- pControl software included



Applications

- Multi-layer thickness measurements
- Contact lens measurements
- In line inspection of glass and plastic
- Silicon wafer thickness measurements
- Ophthalmic measurements
- Condition monitoring

Description

ICon and ICon SL (Scanning Lens) are accurate non-contact position and multi-layer thickness measurement systems that are designed to measure an array of different materials. ICon uses a confocal scanning technique to provide a localised point measurement that is un-affected by surrounding media, which is a key advantage over other optical measurement systems. ICon has a standard measurement range of 3 mm, a working distance of 10 mm and a minimum measureable thickness of 50 μm . ICon SL has a standard measurement range of 4.7 mm, a working distance of 10.5 mm and a minimum measureable thickness of 40 μm . Other optical configurations are available. The ICon technology can be fully customised and integrated into your equipment, providing an elegant solution for your measurement needs.

Technical

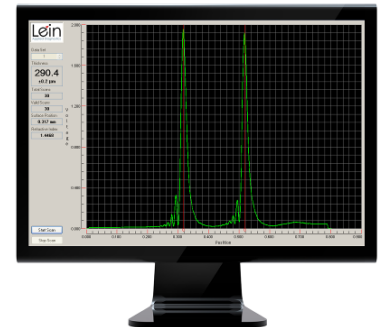
Parameter	ICon			ICon SL			
	Min	Typ.	Max	Min	Typ.	Max	Unit
Measurement Range		3			4.7		mm
Working Distance		10			10.5		mm
Minimum Measureable Thickness		50			40		μm
Spatial Resolution		0.9			2		μm

Linearity		3	
Wavelength		1310	
Maximum Angle		7	
Spot Size		6	
Scan Rate	5		30
Operating Temperature	0		45

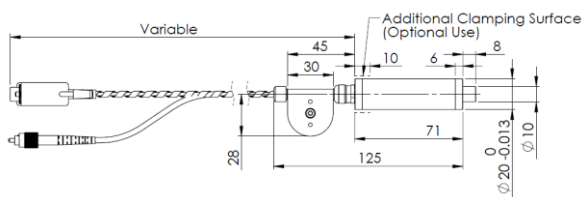
	5		μm
	1310		nm
	7.5		$^{\circ}$
	6		μm
5		30	Scans/s
0		45	$^{\circ}\text{C}$

pControl System Requirements

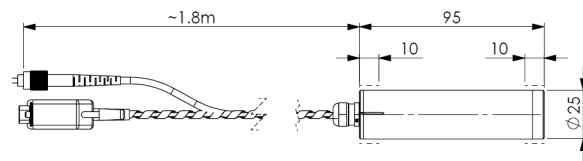
Minimum Processor: Pentium 4 2Ghz
 Minimum Graphics: DX9 compatible or later with 128MB of GRAM.
 Minimum Resolution: 1024x768
 Minimum RAM: 1GB
 Hard Drive Space: 10MB
 USB: 1 x USB 2.0 port
 Operating System: Windows XP SP2 or Later, Windows 7 with .NET framework 3.5 or later.



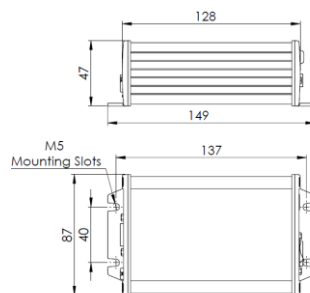
Mechanical



ICon

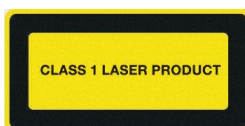


ICon SL



Control Electronics

Warnings



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

Issue	01
Date	20/05/2014