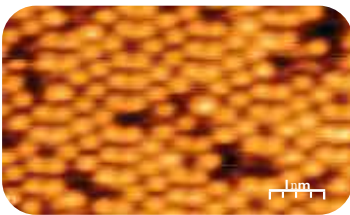
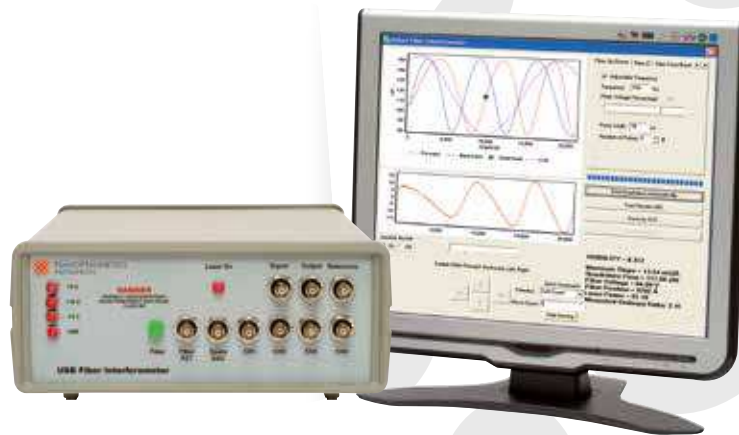


# USB Fibre Interferometer

## Complete Fibre Interferometer System for Atomic Force Microscopes



AFM Image of Si(111) Surface, Image Courtesy of Dr. Özgür Özer & Prof. J. B. Pethica TCD, IRELAND



### System Specifications

#### Laser

- Wavelength : 1310 nm (other wavelengths are optional)
- Threshold Current : 10 - 15 mA typical
- Optical Out Power :  $3000 \pm 400 \mu\text{W}$ , adjustable in 100 steps
- Laser Power Control : x1 - x100 adjustable
- RF Modulation : Modulation frequency & Amplitude are controlled from software for noise reduction

#### Photodiode Module (Signal & Reference InGaAs Photodiodes)

- Responsivity :  $0.9 \pm 0.03 \text{ A/W}$
- Photodiode Gain Control: x1, x2, x4, x8
- Dark Current : 0.1 nA

- Off-Set DAC Resolution: 16-bit
- Spare DAC Range :  $\pm 10 \text{ V}$
- Power Requirement : 240/220/110/100 VAC selectable, 50/60 Hz 100 VA

- Physical Dimensions :  $\sim 250 \times 350 \times 100 \text{ mm}$
- PC Connection : USB 2.0, High Speed, 480 Mbps
- Physical Environment : Maximum operating temperature of  $30^\circ\text{C}$  with maximum 30% relative humidity

Software upgrades are free for lifetime

Note: Specifications are subject to change without notice.