AMBIOS Surface Profilometer:

**Location** - Samtel Center for Display and Technology (SCDT), Clean Room - P2.

**To use contact:** Prof. Deepak Gupta (SCDT Coordinator)

Ambios Profilometer is a computerized, high-sensitivity surface profiler that measures roughness and step height in a variety of applications. It features the ability to measure precision step heights from under 10 Angstroms to as large as 1.2 millimetres. The profiler incorporates a new optical deflection height measurement mechanism and magneto static force control system that results in allow force (loads as small as 0.03mg) and low inertia stylus assembly. These innovations combine to produce a surface profiler capable of measuring soft films and substrates without surface damage. Simply position your sample on the scan stage, select a scan recipe, click the scan button, and as soon as the scan is complete, your surface data is immediately available for analysis.

The XP-100 Profilometer provides an affordable, high resolution surface measurement capability that nicely complements other analytical instruments.

![AMBIOS XP-100 Thickness Profilometer.](image)

Profilometer provides following features:

- Scan Length range - 30mm maximum
- Sample Thickness - 20mm
- Vertical resolution - 100nm
- Vertical range - 1200um maximum
- Step height repeatability: 5Å² Repeatability: approx 1um step height
- Sample view camera - colour camera
- Standard magnification - 100X
- Stylus tip radius - 2.5um
- Stylus force range - 0.03-10mg