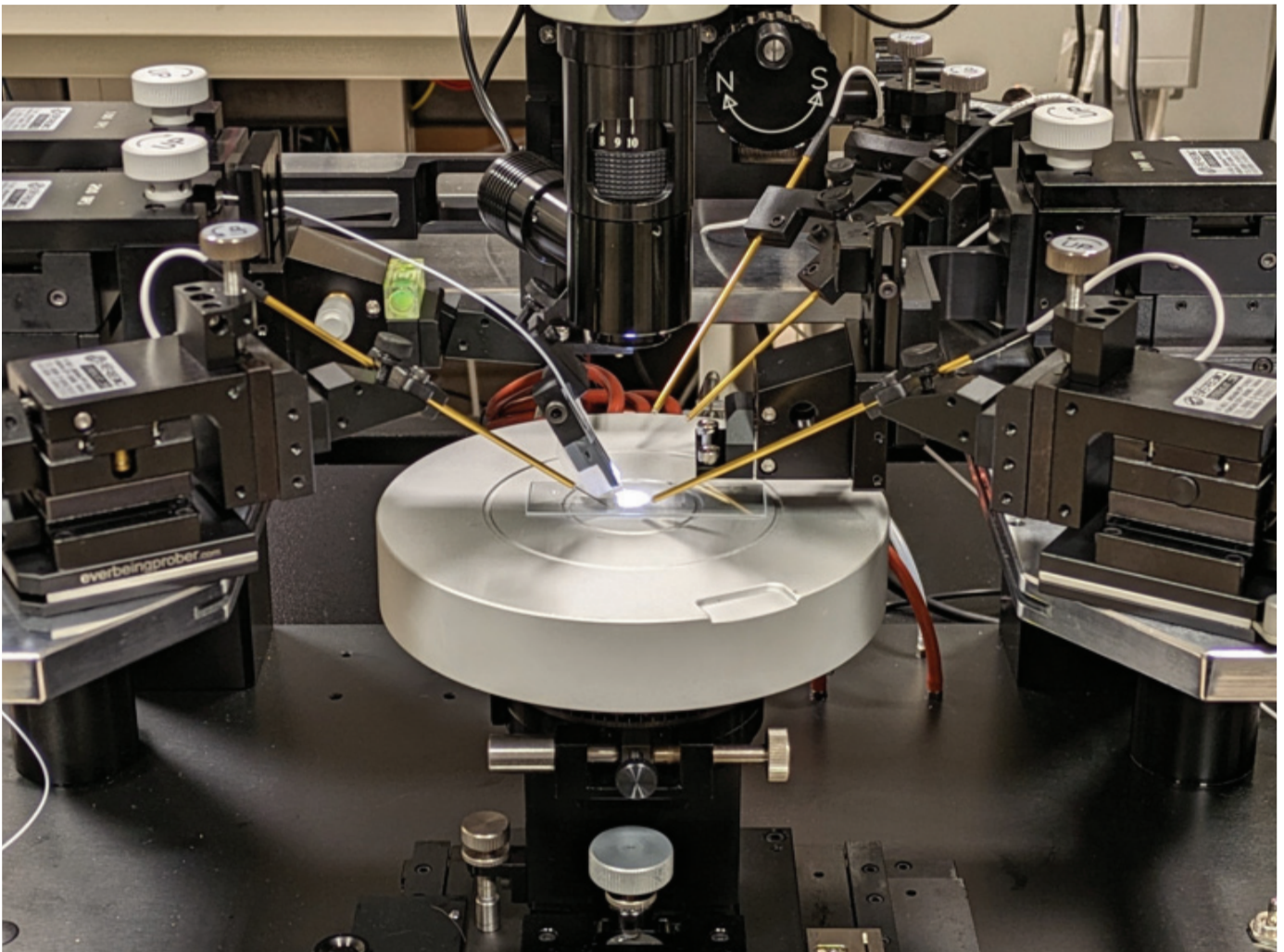


EverBeing Fibre Optic Probe Station

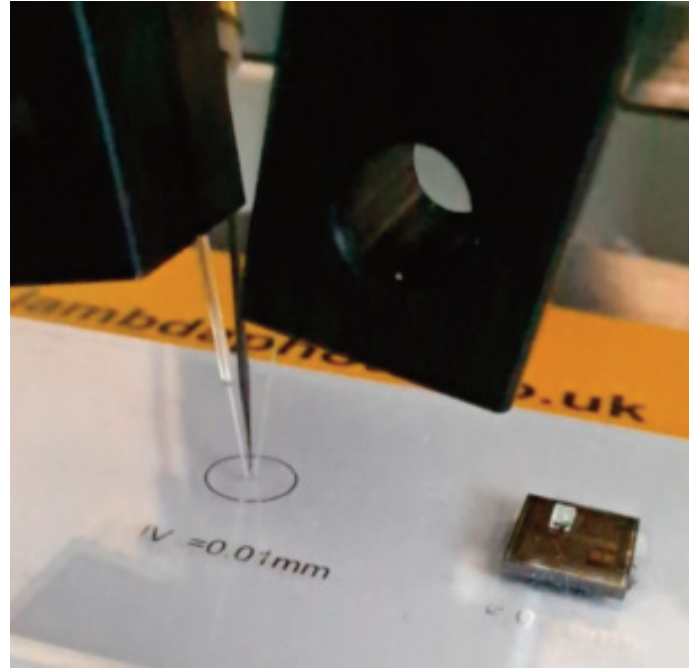
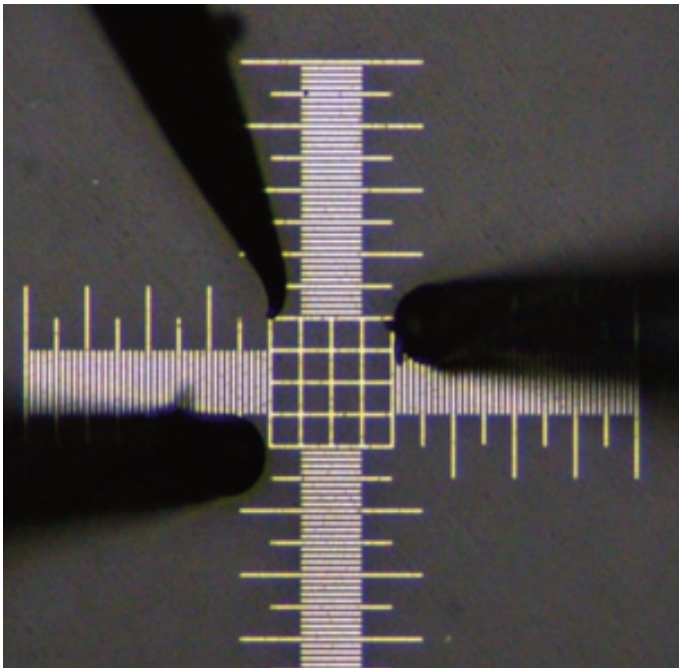


Our photonic probe station allows precision alignment and characterisation of optical fibre, DC and RF measurements at an affordable cost. The system allows the user full flexibility in positioning from vertical to horizontal with both course and fine angle adjustment inbetween.

Our standard system is based on a 4-inch (100mm) chuck, we can also offer systems upto 12-inch for ambient, high temperature and even cryogenic probing.

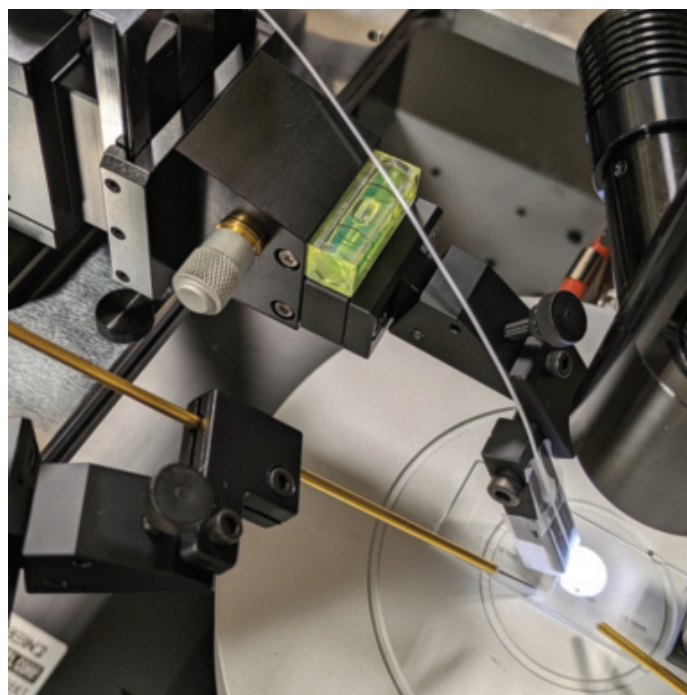
Fibre Optic Probe Station

The image below is looking at 1mm crosshairs, two fibre holders and one DC positioner. Lambda can offer microscope magnification from 80X to 1650X.

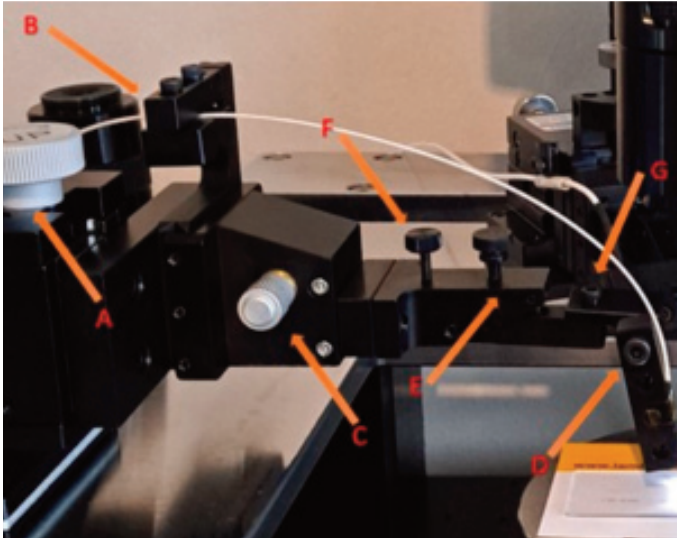


The system allows full flexibility to inject fibre into the DUT from horizontal to vertical and any angle in between. EverBeing precision micropositioners allow better than $0.3\mu\text{m}$ alignment in X-Y-Z, fibre alignment from $0-90^\circ$ with theta adjustment. The positioners large knobs allow fine adjustment and as the movement is held against a spring on

linear bearing, the micropositioner has zero backlash. Whilst using other brands of micropositioners a jump may be noticeable when the direction is changed, eliminating this jump allows for greater fine tuning using a power meter at the critical stage. Using EverBeing vernier micropositioners creates zero backlash.



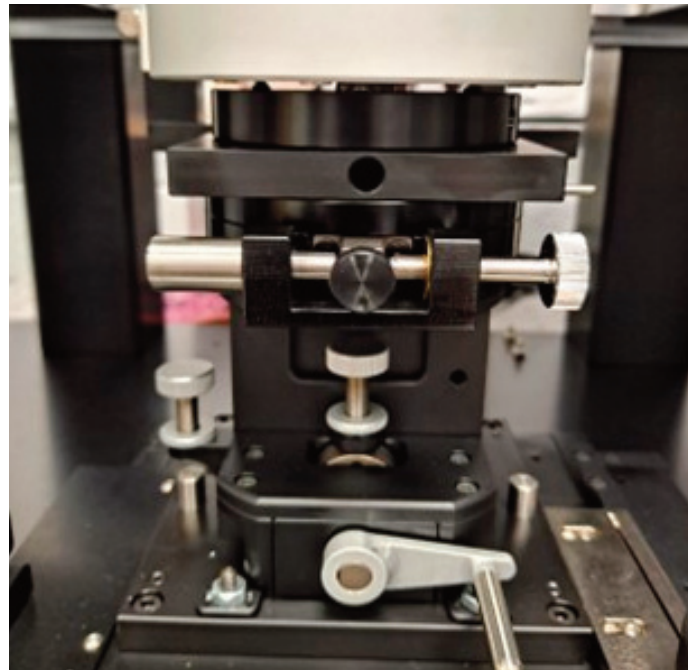
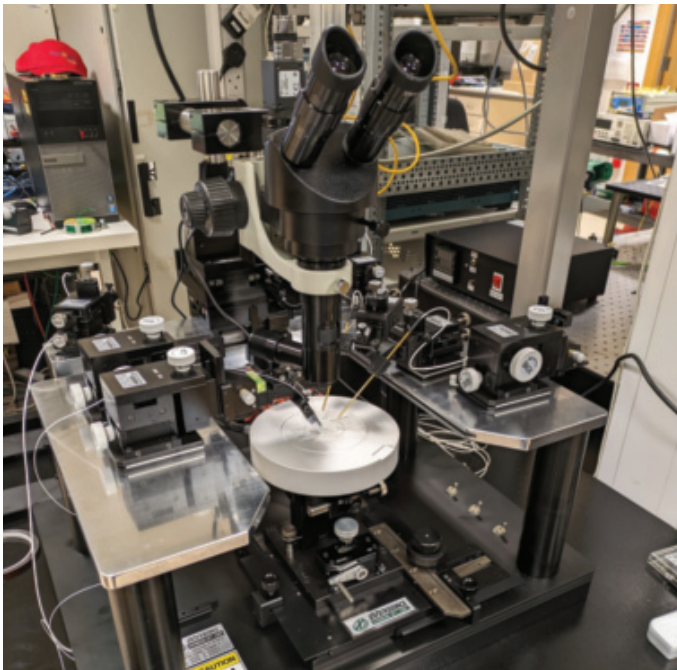
Micropositioner/Fibre Holder Adjustment



Fibre Adjustments

- A. Z- Micropositioner Height Adjustment $<0.3\mu\text{m}$
X-Y micropositioner adjustment $<0.3\mu\text{m}$
- B. Fibre cable clamp
- C. Theta adjustment
- D. Course angle adjustment
- E. Fine angle adjustment
- F. Angle lock
- G. Yaw – angular adjustment

4-inch System Fitted with Optional Hot Chuck & Microscope Tilt



Fibre Holder Design

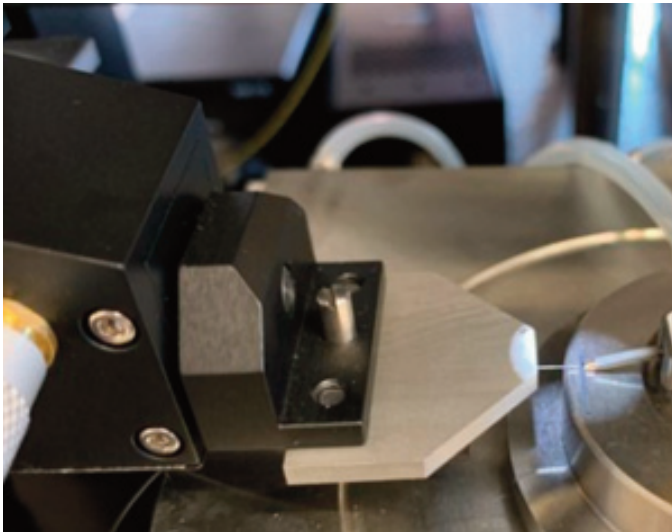
The system has been designed for complete flexibility. The standard rectangular section at the end that holds the fibre in place with Kapton tape, is 10mm square, 30mm in length with a precision 1mm V groove. This is secured in place with a M4 bolt. This allows the user to custom build their own adapters to use with the micropositioner, single, multiple or fibre arrays.



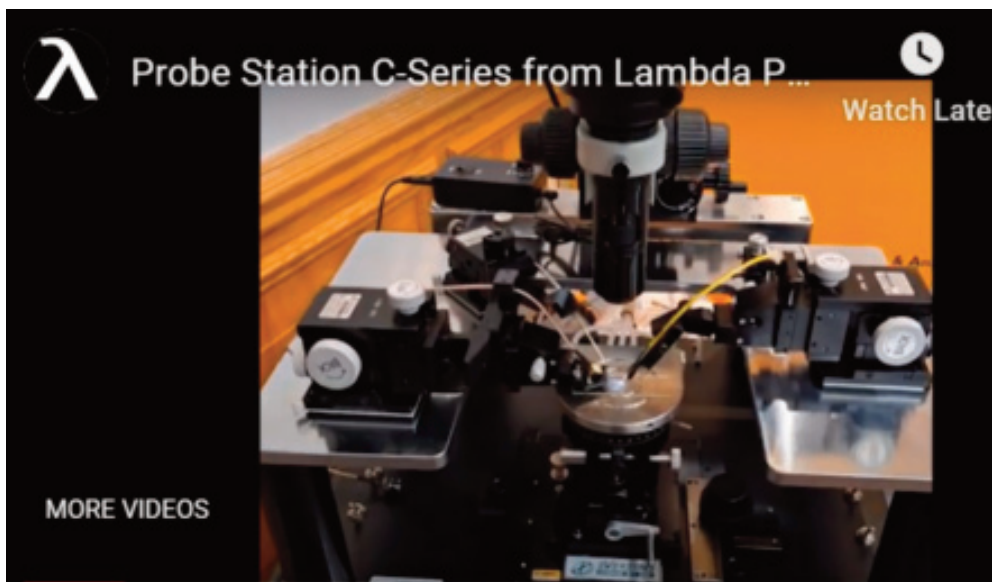
Test & Measurement Equipment Specialists

Fixed Horizontal Fibre Holder Design

The system has been designed for flexibility, however when probing horizontally, Lambda can offer a low-profile fibre holder as shown below that allows precise alignment and into a grating coupler or DUT. The fibre is held underneath using Kapton tape and a precision 1mm V groove.



For further information **CLICK HERE**, scan the QR code or go to:
<https://www.lambdaphoto.co.uk/everbeing-photonic-fibre-optic-probe-station.html>



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