

Here's a review of just a few of the thousands of items in the 206 page Elliot/ThorLabs catalogue as well as some exciting new products!



Polarimeter

The model PA410 is a versatile full polarimeter, which utilises the rotating quarter waveplate (QWP) technique to measure the state of polarisation (SOP) and degree of polarisation (DOP) of an incident beam. Both free space beams and connectorised fibres are supported. The SOP is displayed numerically as a normalised Stokes vector and graphically as a vector on a unit Poincare sphere. The DOP measurements include the total DOP, the degree of linear polarisation (DOLP) and the degree of circular polarisation (DOCP).

Model PA410-EC Range 450-700nm Price £4357
Model PA430-EC Range 1100-1600nm Price £4826

The Thorlabs' Polarisation Analyzer Software offers the user powerful features.

The Windows-based software offers:-

- Real-time graphical display of polarisation vector, degree-of-polarisation and ellipticity measurement
- User-configured display options: sample rate, update rate, Stokes polarisation vector tracer line with depth shading and tracer line strength.
- Numerical data pop-up windows showing raw voltages, normalised Stokes vectors, DOP, DOLP, DOCP, ellipticity and azimuth angle.
- A prescribed Calibration Algorithm and Manual Calibration mode in which elements of the calibration matrix may be manually entered.
- Poincare sphere rotations and zoom.
- Data acquisition mode, 8 channels: 'Raw' detector voltages may be recorded and viewed on a time-elapsing graphing window.

Featured in this issue :

Polarimeter



Omega Meter: beam size analyser

Single axis translation stage



High speed photo detectors



Ultrastable Kinematic Optical Mount



White Light Test Source



Optical Mounting Components

Translation Stages: X, XY & XYZ

NEW!



PTS1-X Specifications

- 25mm Travel Distance
 - Lightweight Anodised Aluminum Body
 - Precision Hardened V-Groove and Ball Design
 - M6 Mounting Holes in 14 Places
 - Stackable XY, XZ*, & XYZ*
 - Horizontal Load Capacity: 30kG.
 - Vertical Load Capacity: 10 kG
 - Horizontal & vertical run-out better than 15 μ rads
- *Requires AP90*

Metric Item	Price	Description
PTS1X/M-Y	£220	Single axis translation stage
PTS3X/M-Y	£600	XYZ Translation stage inc Z bracket
AP90/M-Y	£70	Z bracket for vertical mounting

PTS1X/M Special Introductory Price of £220



High Speed Photodiode Detectors

NEW!



Time-domain optimised fast photodetectors for UV, visible and IR spectral regions

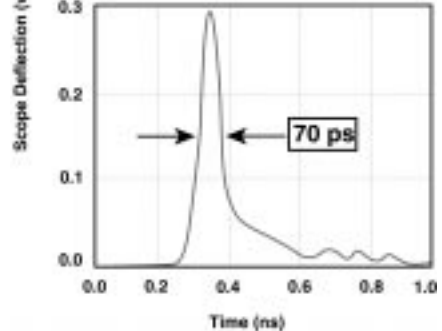
Our photodetector systems provide the best performance-to-price ratio. These GigaHertz-bandwidth photodetectors are designed and built with microwave qualified parts, so they achieve state-of-the-art performance at far below state-of-the-art prices.

Note: Fiber is not included

Item # SIR5-FC Detector

Impulse response* to a 100 fs Pulse

*Signal acquired by a 40GHz sampling scope



Test data included with every unit*

* Tested with 90GHz sampling scope and 100fs laser pulses

Technical Data

	SUV7-FC	SV2-FC	SIR5-FC
Model number	SUV7-FC	SV2-FC	SIR5-FC
Photodetector material	GaAs	Si	InGaAs
Wavelength (nm)	350-850	320-1100	900-1650
Bandwidth (GHz)	7	2	5
Fibre input connector		FC	
Output impedance		50ohm	
Max safe output		2.5V	
Battery power supply		20V	
Dimensions mm		25x25x25	
Price (exc VAT)	£1390	£555	£965

Omega Meter: beam size measurements

ELLIOT
SCIENTIFIC
LTD



- One Dimensional Beam Waist Measurements
- Swivel-Head design Allows Fast X/Y Profiling
- 20µm-4mm Beam Radius Range
- RS232 Serial Interface Allows Customisation of Measurement Parameters

The Omega Meter gives an easy-to-use, low cost, fast and accurate measurement of laser beam size. It displays with an accuracy of 5% and a resolution of 1µm.

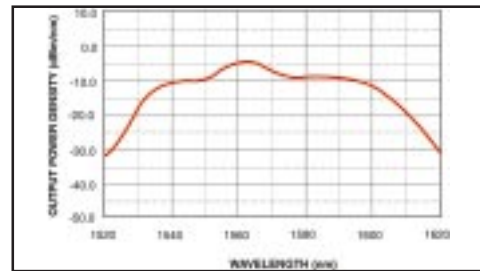
The Omega Meter includes an analogue output of the beam profile for monitoring the spatial structure of the laser. This signal can be easily displayed on an oscilloscope to view one dimension of the beam profile. The swivel-mounted head allows fast measurement of orthogonal profiles. *(see inset picture)* A Serial Interface allows remote monitoring of the beam measurements for automated data acquisition.

WM-100-EC Specifications

Beam dia (min)	20µm
Beam dia (max)	4mm
Wavelength range	400-1100nm
Mounting holes	M4-0.7
Power supply	230VAC 50Hz
Price	£598

High Brightness ASE White Light Source

This source produces Amplified Spontaneous Emission covering 1530-1610nm with a high spectral power density. It is constructed from single Er-doped fluoride fibre.



Preliminary Specifications

Output Fibre	SMF
Total Output Power	> +10dBm
Spectral Density	> -20dBm/nm @ 1530,1610nm
	> -13dBm/nm @ 1540-1600nm
Power Stability	< ±0.02dB (15min)
Operating Temp	0°-40°C



Ultrastable Kinematic ½" and 1" Optic Mounts



- 3 Flexlock™ adjusters
- Tilt and Translation
- Ultrastable design
- Lockable adjusters

The KS05 and KS1 feature our Flexlock adjusters to provide tilt and translation. Combined with an ultra-stable mechanical package, it provides a truly set-and-forget optical mount. Mounting holes:- M4 or 8/32 screws. These unit are shipped fully-assembled with all three lockable adjusters included.

KS05/M: £63

KS1: £78

Opto-Mechanical Components

The ThorLabs range of mirror mounts and mounting components are among the most popular items we offer and we've sold literally thousands of them in the UK and Ireland. They are well made, cleverly engineered and affordably priced. No one can meet your needs for laser and optical accessories as well as Elliot/ThorLabs! Here's a selection of our most popular items:-

Kinematic Mirror Mounts



This is our most popular mirror mount. It features hardened inserts under the adjuster screws, an angular range of $\pm 4^\circ$ and adjuster screws with brass sleeves.

Metric Item Part No	Size	Price
KM1/M	25mm/1" optics	£48

Posts



Precision ground 12.7mm dia stainless steel post. One end has a M6 tapped hole, the other has a removable M4 threaded stud.

TR30/M	30mm	£4
TR40/M	40mm	£4
TR50/M	50mm	£4
TR75/M	75mm	£5
TR100/M	100mm	£6
TR150/M	150mm	£7
TR200/M	200mm	£7
TR250/M	250mm	£11
TR300/M	300mm	£12.50

Post Holders



ThorLabs design has a spring-loaded plunger to hold the post firmly prior to final tightening; this allows one-handed positioning. The bottom has a M6 tapped hole.

PH1/M	25mm	£8
PH1.5/M	40mm	£8.50
PH2/M	50mm	£9
PH3/M	75mm	£10
PH4/M	100mm	£11
PH6/M	150mm	£15

Bases



All bases can be attached to post holders with a socket screw fitting in a countersunk hole. All base are compatible with both English or Metric optical tables

BA1	25 x 50 x 9.5mm	£7
BA1S	25 x 58 x 9.5mm	£8
BA2	50 x 75 x 9.5mm	£10

Have you received your Elliot ThorLabs Catalogue?

This newsletter gives you a small insight into just a few of the thousands of laser, fibre and optical accessories offered by Elliot/ThorLabs. The 206 pages of our catalogue are packed with useful and unique items, all at affordable prices. Whether you're an expert or new to research, we can help you with selection, applications and technical support. If you don't have a copy of our catalogue, give us a call. We'll get one to you asap!

Prices shown do not include VAT and shipping



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