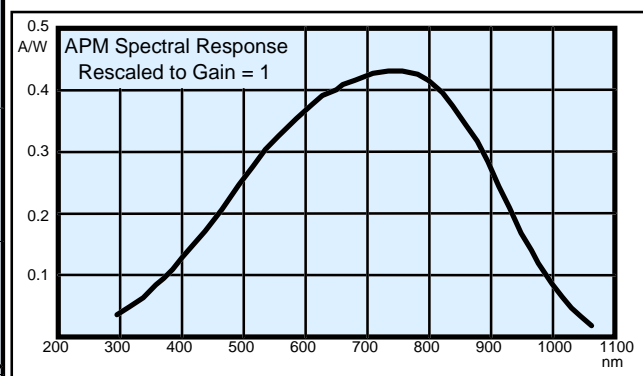
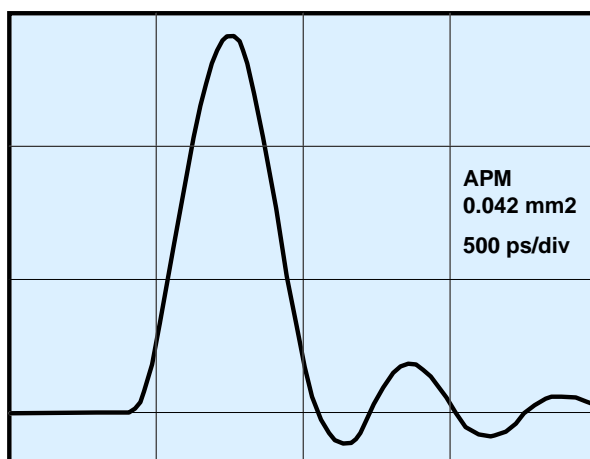


APM - 400

High Speed Avalanche Photodiode Module

- Active Area from 0.03 mm² to 7 mm²
- High Speed: Down to 150 ps Pulse Rise Time / 320 ps FWHM
- Single +12V supply
- Internal Temperature Compensation
- Spectral Range from 330 nm to 1100 nm

The APM-400 is a high speed avalanche photodiode module for the detection of pulsed light signals and for trigger applications. It includes the bias voltage supply for the avalanche photodiode along with a temperature compensation circuit for the diode gain. Due to its single +12V supply the device can be powered directly from the **bh** Sampling / Boxcar Module PCS-150, the **bh** Time-Correlated Single Photon Counting Modules or from a conventional +12V power supply.



Becker & Hickl GmbH
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intelligent
measurement
and
control systems

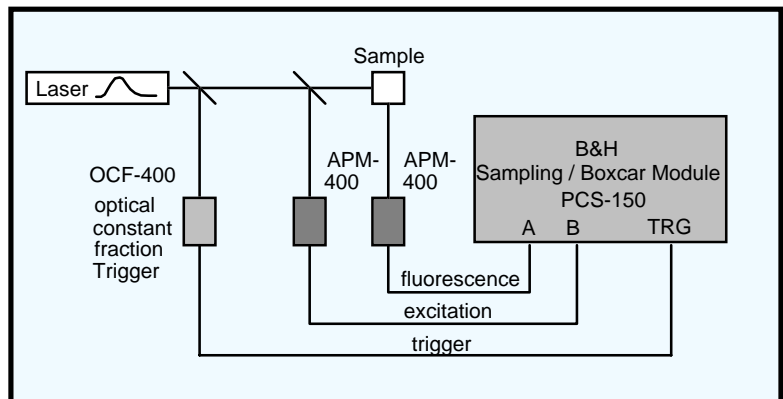
APM - 400

Specification

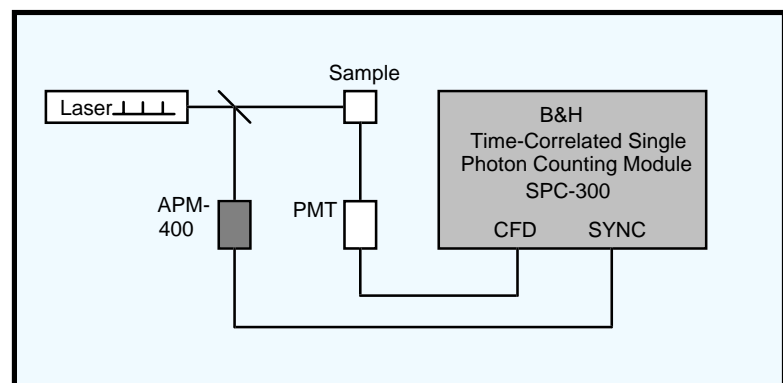
Active Area (please specify)	0.03	0.042	0.19	0.78	1.77	7.0	mm ²
FWHM (630nm, 50 Ohm)	0.45	0.32	0.4	0.5	2.3	3	ns
Pulse Rise Time	0.15	0.16	0.2	0.25	1.1	1.2	ns
Gain (Adjustable by Trimpot)	1 to > 100						
Output Polarity	positive (APM-400 P) or negative (APM-400 N)						
Spectral Range	330 to 1050						nm
Peak Sensitivity Wavelength	750						nm
Quantum Efficiency (630 nm)	75						%
Dimensions	91 mm x 38 mm x 30 mm						
Signal Connector	SMA						

Applications:

Laser induced Fluorescence
Excitation with N₂ Laser,
Recording of Fluorescence and
Excitation Signal by Sampling /
Boxcar Technique



Triggering of Time-Correlated
Single Photon Counting
Experiments



Maximum Ratings

Supply Voltage	-0.3 V ... +13 V
DC Output Current	0.5 mA
Light Pulse Power	100 kW (Duration < 2 ns)
Average Light Power	100 mW
Operating Temperature	0°C ... +70°C

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