

APD210/310

High Sensitivity Detector Unit

MenloSystems



KEY SPECIFICATIONS

- High Speed Response: 3 dB Bandwidth 5 MHz to 1 GHz
- Spectral Range APD210: 400 -1000 nm
- Spectral Range APD310: 850 -1650 nm
- Temperature Compensated Gain for 10°C to 40°C Ambient Temperature

APPLICATIONS

- Fast Laser Pulses
- Ultra Low Light Level Signals
- Beat Signal of Low Level Inputs

FEATURES

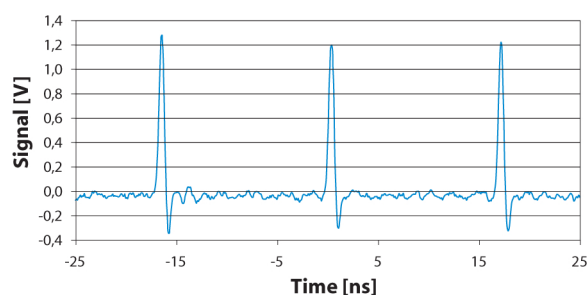
- Avalanche Photodiode Temperature Compensated Setup
- Integrated Radio Frequency Amplifier
- Continuously Adjustable Gain Setting
- Long Term Field Tested in our FC8004 and FC1500 Optical Frequency Synthesizer

For applications that require highest sensitivity, the APD avalanche photodiodes can provide an extremely sensitive alternative to traditional PIN photodiodes. The APD is sensitive and fast enough for the characterization of, for example, pulsed solid-state lasers on the nanosecond time scale. It maintains high gain stability over the 10°C to 40°C temperature range by utilizing a temperature compensation circuit, which adjusts the ~150 V DC bias to ensure operation near the breakdown voltage.

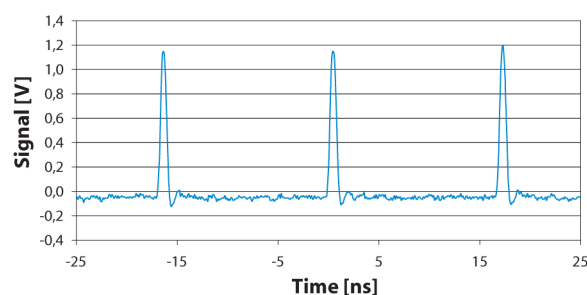
APD210

APD310

Pulse Response APD210 to a sub-250 fs Pulse Train at 780 nm

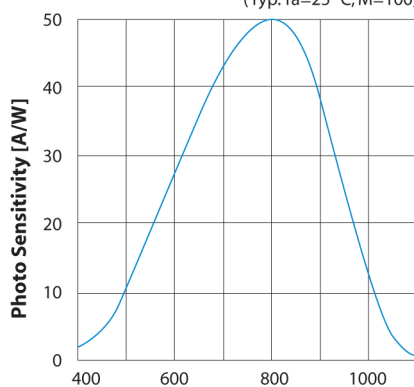


Pulse Response APD310 to a sub-250 fs Pulse Train at 1560 nm



Spectral Response APD210

(Typ. Ta=25 °C, M=100)



Spectral Response APD310

(Typ. Ta=25 °C, M=1)

