

# FPD610

## High Sensitivity Fast PIN Photodetector

**MenloSystems**



### KEY SPECIFICATIONS

- Frequency Range DC-600 MHz
- Spectral Sensitivity from 400-1000 nm or 950-1650 nm
- 3 dB Bandwidth DC-500 MHz
- Rise Time below 1 ns

### APPLICATIONS

- Efficient Homodyne and Heterodyne Extraction of Optical Beat Signals at Frequencies up to 600 MHz
- Detection of Low Light Level Signals
- Characterization of Pulsed or Modulated Light Sources Features
- Detection of Chopped Light Sources

### FEATURES

- Highest Signal-to-Noise Ratio with true DC
- Flat Spectral Response (less than 3 dB up to 500 MHz)
- OEM Integration
- Fiber Coupled or Free Space Optical Input
- Integrated Low Noise Transimpedance Amplifier
- Easy-to-use Package
- Low Noise Power Supply included

The high sensitivity ultrafast PIN photodetector FPD610 product family combines broad bandwidth and high gain at frequencies up to 600 MHz. These photodetectors are easy-to-use Si- or InGaAs-PIN photodiode packages with an integrated high-gain, low-noise transimpedance amplifier.

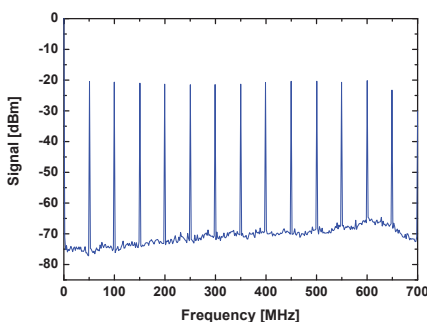
The 3 dB bandwidth of the DC-coupled device is 500 MHz.

Models for both visible and near infrared range are available, both with either free space or fiber coupled optical input. The compact design of these detectors allows for easy OEM integration. Included with each amplified photodetector is a low noise power supply, which features a universal AC input.

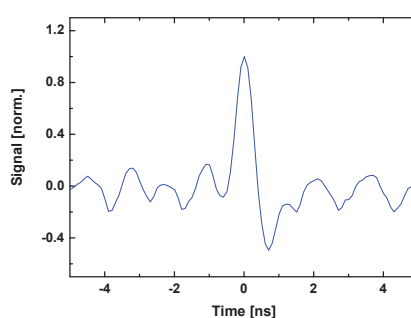
## FPD610

Response to a pulse train with sub 250 fs pulses at 1560 nm and 200 nW optical average power:

Frequency Characteristics



Time Characteristics



Rise Time

