The PulseScout2™ Autocorrelators are a versatile, easy-to-use diagnostic tool for measuring ultrafast pulses. This autocorrelator family is capable of measuring pulse widths from both high repetition rate (MHz) oscillators and low repetition rate (kHz) amplifiers from Visible to IR wavelength range. The unit can be equipped with either a photodiode detector module to detect and measure high-energy amplified pulses or a photomultiplier based detector to measure low-energy oscillator pulses. Conveniently, these detector modules use the same autocorrelator optical head and are fully interchangeable in seconds. Alignment is straightforward and can also be done easily even for first time users, making this autocorrelator an ideal diagnostic tool for all of your ultrafast applications.

**THE BASE MODEL**

The base model is the corner stone of the PulseScout2 Autocorrelator family:

**PSCOUT2-BASE**

The base model contains the Optical Head and Control Unit for the autocorrelator system. The detector module is not included.
**PulseScout2**

**THE DETECTOR MODULES**

A detector module is necessary to complete the autocorrelator system. Multiple detector modules can be used with a single Base Model for additional wavelength range and sensitivity. The PD models contain a photodiode (PD) and can handle higher pulse energy from amplifiers, while the PMT models consist of high sensitive photomultiplier tube (PMT), suitable for low-energy oscillator pulses.

The detector module also includes the necessary SHG Crystal for the PulseScout2. It will need to be installed before operation. Different crystals are required for different wavelengths.

The modules are available in four wavelength ranges:

- **BLUE (420 - 550 nm)**
  - PSCOUT2-BLUE-PD
  - PSCOUT2-BLUE-PMT
- **RED (520 - 750 nm)**
  - PSCOUT2-RED-PD
  - PSCOUT2-RED-PMT
- **NIR (700 - 1100 nm)**
  - PSCOUT2-NIR-PD
  - PSCOUT2-NIR-PMT
- **IR (1000 - 1600 nm)**
  - PSCOUT2-IR-PD
  - PSCOUT2-IR-PMT

**WHICH MODULE SHOULD I CHOOSE?**

A rule of thumb is to select:

- **PMT module for an Oscillator (such as Tsunami™)** with a Repetition Rate > 1 MHz
- **PD module for an Amplifier (such as Spitfire Pro™)** with a Repetition Rate < 1 MHz.

**SCPI INTERFACE SOFTWARE**

Enabling remote control of the PulseScout2 via TCP/IP using SCPI command structure. This software package is included with the base model unit. Utilize this for integration of the PulseScout2 into automated measurement setups.