



**FEMTOCHROME®
RESEARCH, INC.**

FR-103HP RAPID SCANNING AUTO/CROSSCORRELATOR



Specifications:

- Sensitivity: 10^{-2} W^2
- Resolution: $\sim 1 \text{ fs}$
- Wavelength Range: 410-5000nm
- Scan Range: $> 60 \text{ ps}$
- Rep Rates: $> 1\text{kHz}$ ($> 5\text{Hz}$ w/CDA)

Options:

- Free Space/Fiber Coupled (/FA)
- Noncollinear/Interferometric (/IO)
- Crosscorrelation Option (/CC)
- Computer Data Acq. Option (/CDA)

The FR-103HP is a compact NL crystal autocorrelator, suitable for high power lasers ($P_{av} > 5\text{mW}$). It is available with a scan range $> 60\text{ps}$ (suitable for pulsewidths within 10fs-15ps) and covers a wide range of wavelengths with easily interchangeable plug-in detector modules. The standard FR-103HP provides 'real-time' pulsewidth monitoring capability for rep rates down to 1kHz. Pulsewidths from lower rep rate lasers are monitored and analyzed on a PC display, utilizing the /CDA option. Fiber coupled lasers can be input using the /FA option, providing for alignment free operation. The standard noncollinear configuration, leading to background-free autocorrelation with high dynamic range, can easily be changed to fringe-resolved operation with the Interferometric Option (/IO). Crosscorrelation of two synchronized beams can be readily obtained using the /CC option.