

Model 788xOV, Oven-stabilized Quartz Oscillator Option for P7887, P7888 and P7889

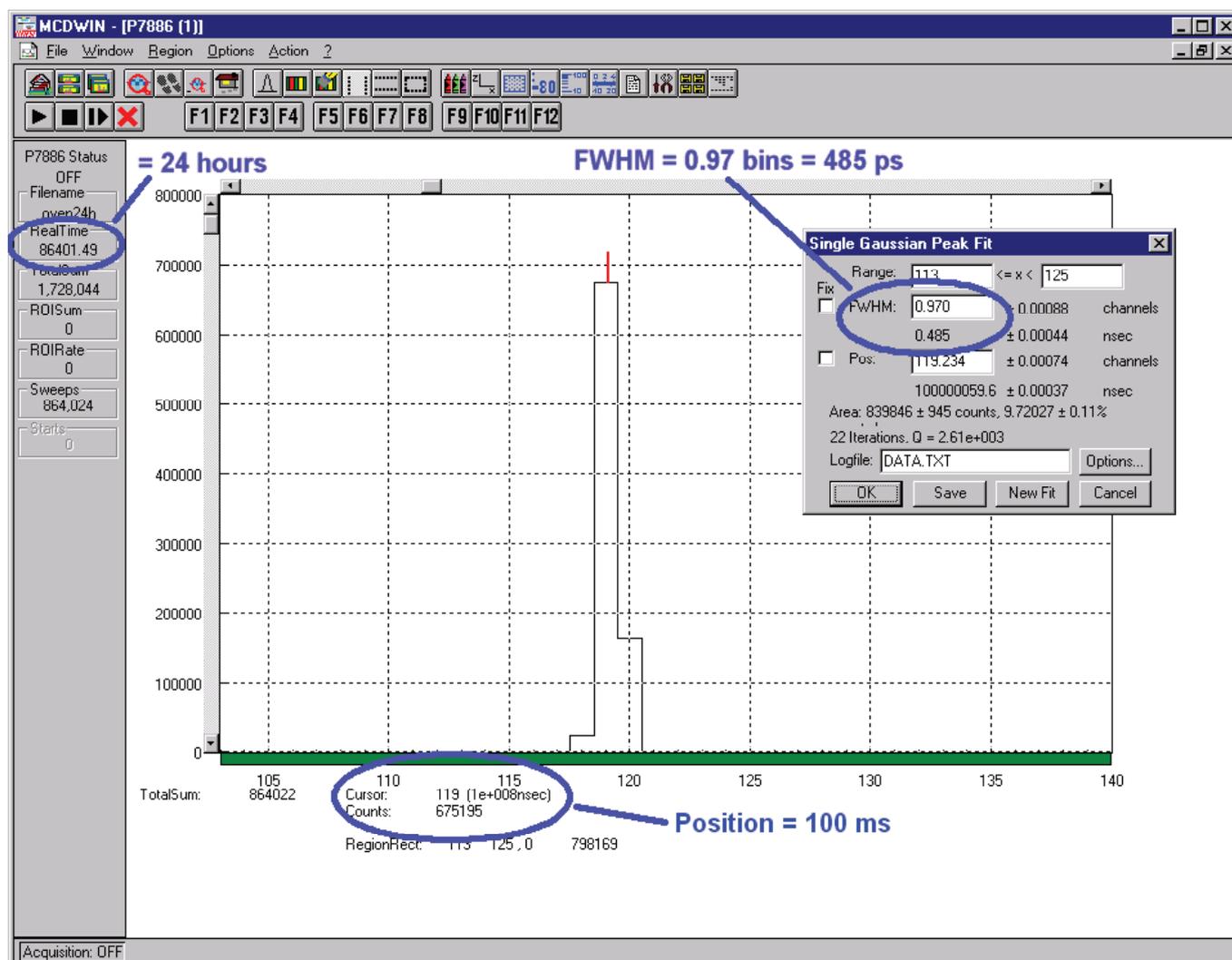
FEATURES

- Excellent resolution for longer period time measurements:
Fitted value: 485 ps FWHM at a time bin of 100 ms, data accumulation: 24 hours using the P7886
- Unsurpassed short- and long term time stability of $<3 \times 10^{-8}$
- Replaces the standard non-oven stabilized PLL oscillator of the P7887, P7888 and 7889

Applications

Typical applications:

- High resolution Electro Spray Time-of-Flight Mass Spectrometry with high mass range at full 500 ps time resolution and burst data rates of up to 2 GHz
- Static high res. TOF SIMS secondary electron mass spectrometry - used for example in plant pathology, analyzing molecules from biological samples
- TOF SIMS to analyze traces of heavy metals



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Examples:

- a) analysis of human milk to determine which part is responsible for transporting heavy metals
- b) characterizing peptides of a mass up to 3000 and higher
- Laser-induced fluorescence spectroscopy in biological samples
- Laser-induced photo-electron spectrometry to analyze the electronic state of gas and solid state samples
- LIDAR with very high spatial resolution (down

DESCRIPTION

The Model 788xOV significantly improves the time stability of one of the fastest commercially available multiple-event time digitizers.

This option for example enhances the capability of high resolution Electro Spray Time-of-Flight Mass-Spectrometers to reach a better than 1 ppm mass accuracy.

The 788xOV option is also recommended when longer data acquisition times are required by the users application.

PERFORMANCE

Time stability over the full operating temperature range: 0.03 ppm

Time stability per day: 0.0015 ppm

Time stability per year: 0.1 ppm