

DIGITIZERS DSR (DIGITAL SIGNAL RECORDER) AND THEIR APPLICATION FOR NUCLEAR PHYSICS RESEARCH

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A waveform digitizer is an electronic data acquisition device that digitizes analog signals using fast analog-to-digital converters (ADCs) at a specified clock frequency and stores the resulting digitized data to disk or memory for subsequent processing.

The use of digitizers in modern experiments as the main component of a data acquisition system in many cases allows significant gains in compactness and cost, and also provides more opportunities for the data analysis.

The report discusses the characteristics and features of the DSR-2, DSR-32, DSR-8/16, and DSR-128 digitizers with a high-speed USB3 interface, developed at FLNP JINR.