

Re: Want to buy, but confused about oscilloscopes

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From: Terry Given (*my_name_at_ieee.org*)

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John Smith wrote:

> "Paul Mathews" <optoeng@pioneernet.net> wrote in message
> news:ed443a10.0411221021.6c9a3e4a@posting.google.com...
>
>>My opinion: Run, don't walk, away from any digital scope older than
>>about 6 years, especially HP scopes, and most especially 54100 and
>>54200 series, which are incredibly heavy, noisy, impossible to
>>service, and, just plain obsolete.
>>
>>Tektronix scopes are much to be preferred, but they put out some dogs,
>>too. For the casual user, it's hard to beat the TDS210/220 scopes,
>>which can be found for as little as \$500 on ebay, and well worth it.
>>THS720/730 has its place for portable applications, but batteries are
>>lousy nicads, and processor is very slow, meaning that waveform update
>>rate is frustratingly slow.
>>
>>The above mentioned Tek scopes have sampling rates high enough that
>>you seldom have to worry about Nyquist rate, although you must
>>continue to be aware that the sampling rate slows down as you display
>>more time on the screen.
>>Paul Mathews
>
>
>
> Hey, Paul! Thanks for these pointers. This is just the kind of info I need.
>
> Hooha, back to Ebay.
>
> John
>

As an aside I once needed to cobble together an inductor to repair a cooked smps. The only scope I had access to was a 54600. I did a "splat test" on the proposed choke, dumping a large charged cap across it and monitoring the current thru it (10 1R resistors in parallel) and the voltage across it. I got 2 dots on the screen in single-shot mode – IIRC the single-shot sampling rate is a miserable 40MSPS or something low like that. Needless to say the exer