Measurement Uncertainties

Vertical system analog channels							
Input coupling		AC, DC					
Input sensitivity range		1 mV/div to 5 V/div [2]					
Input impedance		1 MΩ ± 2% (11 pF)					
Vertical resolution		8 bits (measurement resolution is 12 bits with averaging)					
Dynamic range		± 8 divisions from center screen					
Maximum input voltage		300 Vrms, 400 Vpk; transient overvoltage 1.6 kVpk					
		With N2862B or N2863B 10:1 probe: 300 Vrms Frequency de-rating (assumes sine wave input): 400 Vpk until 40 kHz. Then de-rates at 20 db/dec until 6 Vpk					
DC vertical accuracy		± [DC vertical gain accuracy + DC vertical offset accuracy + 0.25% full scale] [2]					
DC vertical gain accuracy [1]		± 3% full scale (≥ 10 mV/div); ± 4% full scale (< 10 mV/div) [2]					
DC vertical offset accuracy		± 0.1 div ± 2mV ± 1% of offset setting					
Channel-to-channel isolation		≥ 40 dB from DC to maximum specified bandwidth of each model					
Position/offset range	1 MΩ	1 mV to 200 mV/div: ± 2 V, > 200 mV to 5 V/div: ± 50 V					
Hardware bandwidth limits		Approximately 20 MHz (selectable)					
Horizontal system analog channels							
		2002A	**2004A**	**2012A**	**2014A**	**2022A**	**2024A**
Time base range		5 ns/div to 50 s/div				2 ns/div to 50 s/div	
Horizontal resolution		2.5 ps					
Time base accuracy [1]		25 ppm ± 5 ppm per year (aging)					
Time base delay time range	Pre-trigger	Greater of 1 screen width or 200 µs (400 µs in interleaving mode)					
	Post-trigger	1 s to 500 s					

Measurement Uncertainties

Horizontal system analog channels							
		2002A	2004A	2012A	2014A	2022A	2024A
Time base range		5 ns/div to 50 s/div				2 ns/div to 50 s/div	
Horizontal resolution		2.5 ps					
Time base accuracy [1]		25 ppm ± 5 ppm per year (aging)					
Time base delay time range	Pre-trigger	Greater of 1 screen width or 200 µs (400 µs in interleaving mode)					
	Post-trigger	1 s to 500 s					
Channel-to-channel deskew range		± 100 ns					
Δ Time accuracy (using cursors)		± (time base accuracy [1] reading) ± (0.0016 [1] screen width) ± 00 ps					

1. Denotes warranted specifications, all others are typical. Specifications are valid after a 30-minute warm-up period and from ± 10 °C firmware calibration temperature.
2. 1 mV/div and 2 mV/div is a magnification of 4 mV/div setting. For vertical accuracy calculations, use full scale of 32 mV for 1 mV/div and 2 mV/div sensitivity setting.

Per noi vuol dire 2 sigma

Usare $\delta(\Delta T) \approx 8 \times 10^{-4}\ T_{schermo}$ dove $T_{schermo}$ è l'intervallo temporale mostrato dall'oscilloscopio data la scala dei tempi scelta (oltre ad eventuale fluttuazioni stocastiche che potete apprezzare)