

3000 Series Oscilloscope Calibration Option Specifications

Amplitude												
Ranges	2mV/Div : 5mV/Div : 10mV/Div : 20mV/Div : 50mV/Div : 100mV/Div 200mV/Div : 500mV/Div : 1V/Div : 2V/Div : 5V/Div : 10V/Div : 20V/Div : 50V/Div											
Sequence	1, 2, 5											
Waveshapes	Square Wave (positive going from ground) : DC											
Frequency	1kHz											
Frequency Accuracy	30ppm											
Graticule Height	6 Graticules											
Rise Time	2us											
Fall Time	2us											
Output Terminal	Front BNC (Green LED indicates terminal active)											
Range @ 1Mega Ohm loading	90 Day Rel.		180 Day Rel.		1 Year Rel.		2 Year Rel.					
	%	±	uV	%	±	uV	%	±	uV			
2mV to 50V/Div	0.009	±	20	0.01	±	20	0.01	±	20	0.014	±	20

High Voltage Safety
High voltage output is ramped to allow instruments to auto range
Auto standby is activated when passing through 20V or 200V output values
High voltage (> 20V) output is indicated to user through an audible warning beep

Amplitude Deviation												
Deviation Range	±10%											
Deviation Resolution	3010 : Better than 1ppm • 3041 : Better than 10ppm											
Range	90 Day Rel.		180 Day Rel.		1 Year Rel.		2 Year Rel.					
	%	±	uV	%	±	uV	%	±	uV			
-10% to +10%	0.008		20	0.01	±	20	0.01	±	20	0.014	±	20

Timebase								
Ranges	2ns/Div : 5ns/Div : 10ns/Div : 20ns/Div : 50ns/Div : 100ns/Div : 200ns/Div 500ns/Div : 1ms/Div : 2ms/Div : 5ms/Div : 10ms/Div : 20ms/Div : 50ms/Div 100ms/Div : 200ms/Div : 500ms/Div : 1s/Div : 2s/Div : 5s/Div							
Sequence	1, 2, 5							
Waveshape	Comb below 100ns Sine Wave above 100ns							
Oscillator	Internal Crystal TCXO							
Output Terminal	Front BNC (Green LED indicates terminal active)							
Range	90 Day Rel.		180 Day Rel.		1 Year Rel.		2 Year Rel.	
	ppm		ppm		ppm		ppm	
2ns/Div to 5s/Div	4.5		4.75		5		6	

Timebase Deviation								
Deviation Range	±10% in 0.05% Steps							
Deviation Resolution	Better than 0.05%							
Level (into 50 Ohms)	350mV Pk-Pk							
Level (into 1 MOhm)	900mV Pk-Pk							
Range	90 Day Rel.		180 Day Rel.		1 Year Rel.		2 Year Rel.	
	%		%		%		%	
-9.5% to +9.5%	0.01		0.01		0.01		0.01	

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Leveled Sweep	
Sweep Range - 3050	5MHz to 250MHz
Sweep Range - 3041/3010	Option SCP350 : 5MHz to 350MHz • Option SCP600 5MHz to 600MHz
Waveform	Sine Wave
Leveled Sweep	600mV pk-pk into 50 Ohms
Reference Level	50kHz
Output Terminal	Front BNC (Green LED indicates terminal active)

Range	90 Day Rel. db	180 Day Rel. db	1 Year Rel. db	2 Year Rel. db
5MHz to 250MHz (Option SCP250)				
5MHz to 350MHz (Option SCP350)	0.8	0.90	1	1.4
5MHz to 600MHz (Option SCP600)				

Leveled Sweep	
Frequency Accuracy	See Time markers

50kHz Reference				
Accuracy	90 Day Rel.	180 Day Rel.	1 Year Rel.	2 Year Rel.
Frequency Accuracy	27 ppm	29 ppm	30 ppm	36 ppm
Level Accuracy	0.4 %	0.45 %	0.5 %	0.7 %

Fast Rise	
Frequency	1kHz
Waveform	Square Wave
Accuracy	Better than 2ns

Specifications apply between 17°C and 27°C.

Outside this range an allowance of 0.18 x 1 Year Spec. per °C should be added.

Due to continuous development specifications may be subject to change.