

# OSCILLOSCOPES

## SPECIFICATIONS

<b>Model</b>		<b>C5-4135</b>	<b>CS-4125</b>		
<b>CRT : Type</b>		150mm rectangular, post-accelerator type with inner graticule /illuminated scales (CS-4135 only)			
<b>Accelerating voltage</b>		Approx. 12kV	Approx. 2kV		
<b>Effective area</b>		8x10 div. (1div= 10mm)			
<b>Vertical axis (Common for CH1, CH2)</b>					
<b>Operating modes</b>		CH1, CH2, ADD, ALT, and CHOP			
<b>Sensitivity</b>		1mV/div to 5V/div (1mV/div., 2mV/div.±5%, 5mV, div to 5V/div. ±3%)			
<b>Attenuator</b>		1-2-5 steps, 12 ranges, and fine adjustment			
<b>Frequency Response</b>	DC	DC to 40MHz (-3dB) (5mV/div. to 5V/div.) DC to 5MHz (-3dB) (1mV/div. to 2mV/div.)	DC to 20MHz (-3dB) (5mV/div. to 5V/div.) DC to 5MHz (-3dB) (1mV/div. to 2mV/div.)		
	AC	10Hz to 40MHz (-3dB) (5mV/div. to 5mV/div.) 10Hz to 5MHz (-3dB) (1mV/div. to 2mV/div.)	10Hz to 20MHz (-3dB) (5mV/div. to 5mV/div.) 10Hz to 5MHz (-3dB) (1mV/div. to 2mV/div.)		
<b>Input impedance</b>		1MΩ ± 2%, Approx. 23pF	1MΩ ±2%, Approx. 22pF		
<b>Rise time</b>		Approx. 8.75ns (40MHz) (5mV/div. to 5V/div.) Approx. 70ns (5MHz) (1mV/div to 2mV/div.)	Approx. 17.5ns (20MHz) (5mV/div. to 5V/div.) Approx. 70ns (5MHz) (1mV/div. to 2mV/div.)		
<b>Crosstalk</b>		Below 40dB (at 1kHz sine wave)			
<b>Polarity inversion</b>		CH2 only			
<b>Maximum input voltage</b>		800Vp-p or 400V (DC + AC peak)			
<b>CHOP frequency</b>		Approx. 150kHz			
<b>Horizontal axis (CH2 in put)</b>					
<b>Operating modes</b>		Switch to X-Y on CH1: Y axis / CH2: X-axis			
<b>Sensitivity</b>		Same as CH2 vertical axis			
<b>Input impedance</b>		Same as CH2 vertical axis			
<b>Frequency response</b>		DC : DC to 500kHz (-3dB) / AC :10Hz to 500kHz (-3dB)			
<b>X-Y phase difference</b>		Below 3 degrees at 50kHz			
<b>Sweep : Sweep time</b>		0.2μs/div. to 0.5s/div. ±3%	0.5μs/div. to 0.5s/div. ±3% (0.2μs/div. :UNCAL)		
<b>Magnified sweep (x10MAG)</b>		1-2-5 steps, 20 ranges, and fine adjustment			
<b>Linearity</b>		X10, ±5%	X10, ±5% (0.2μs/div. : UNCAL)		
<b>Linearity</b>		±3% (x10MAG: ±5%) ±3% (0.2μs/div:UNCAL) (x 10MAG: ± 5%, 20ns/div. : UNCAL)			
<b>Triggering : Trigger sources</b>		VERT, CH1, CH2, LINE and EXT			
<b>Mode</b>		AUTO, NORM, FIX, TV F and TV-L			
<b>Trigger coupling</b>		AC, TV-F and TV-L			
<b>Sensitivity</b>	NORM	INT	10Hz to 20MHz	1.5div.	10Hz to 5MHz
		EXT		0.25Vp-p	
	AUTO	INT	20MHz to 40MHz	2div.	5MHz to 20MHz
		EXT		0.3Vp-p	
	TV	INT	50Hz to 20MHz	1.5div.	50Hz to 5MHz
		EXT		0.25Vp-p	
	FIX	INT	20MHz to 40MHz	2div.	5MHz to 20MHz
		EXT		0.3Vp-p	
	TV	INT	FRAME, LINE	1div.	FRAME, LINE
		EXT	LINE	0.2Vp-p	LINE
	FIX	INT	50Hz to 40MHz	2div.	50Hz to 20MHz
		EXT		0.5Vp-p	
<b>External trigger : Input impedance</b>		1MΩ, Approx. 22pF			
<b>Maximum input voltage</b>		800Vp-p or 400V (DC +AC peak)			
<b>Calibration voltage</b>		1Vp-p±3% (Square wave, 1kHz, positive polarity)			
<b>Intensity modulation : Input voltage</b>		TTL level (dims at Hi level)			
<b>Input impedance</b>		Approx. 5kΩ			
<b>Frequency response</b>		DC to 3.5MHz			
<b>Maximum input voltage</b>		84Vp-p or 42V (DC +AC peak)			
<b>CH1 Signal output</b>					
<b>Output voltage</b>		Approx. 50mV/div. loaded 50Ω			
<b>Output impedance</b>		Approx. 50Ω			
<b>Frequency response</b>		100Hz to 20MHz (within ±3dB, loaded 50Ω)	100Hz to 10MHz (within ±3dB, loaded 50Ω)		
<b>Trace rotation</b>		Enables trace rotation adjustment from front panel			
<b>Environmental condition</b>		10°C to 35°C, 85% or less (temperature/humidity for characteristics in spec.)			
<b>Power source</b>		0°C to 40°C, 85% or less (temperature/humidity for operation)			
<b>Power consumption</b>		100/120/220/230VAC ±10% (250V AC maximum), 50/60Hz			
<b>Power consumption</b>		40W maximum	35W maximum		
<b>Case dimensions</b>		300 (W)x 140 (H)x415 (D) mm			
<b>Maximum dimensions</b>		343 (W)x 159 (H)x431 (D) mm			
<b>Weight</b>		Approx. 7.2kg	Approx. 7kg		
<b>Accessories</b>		Instruction manual (1) / Probe (PC 54) (2) / Power cable (1)			