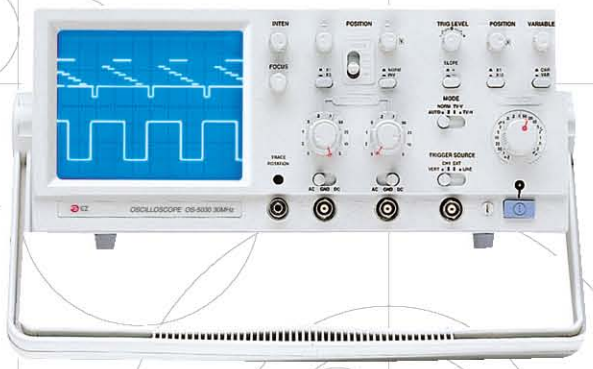
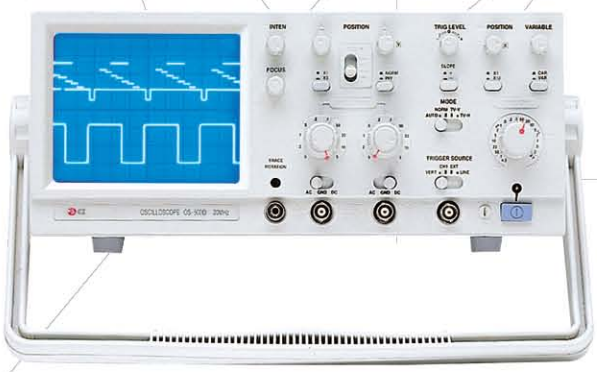
OS-5030, OS-5020, OS-5020G



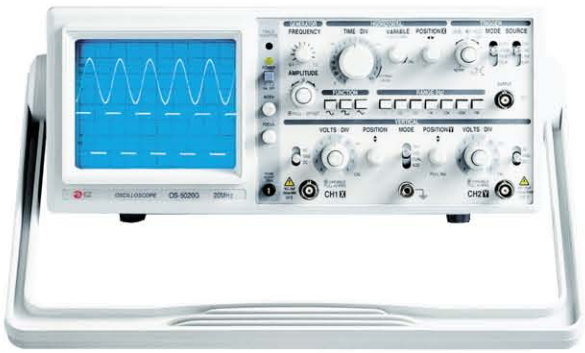
OS-5030 30MHz 2ch dual trace

- DC to 30MHz BandWith, 2CH - dual trace
- 6″ Rectangular CRT with internal graticule
- Sensitivity 1mV / div
- ALT. triggering function(Vert Mode)
- CH2 Polarity inversion switch
- High sensitivity X - Y mode
- Sweep magnification(X10)
- TV sync. separator circuit for stable TV signal observation
- 400V maximum. input voltage



OS-5020 20MHz 2ch dual trace

- DC to 20MHz BandWith, 2CH - dual trace
- 6″ Rectangular CRT with internal graticule
- Sensitivity 1mV / div
- ALT. triggering function(Vert Mode)
- CH2 Polarity inversion switch
- High sensitivity X - Y mode
- Sweep magnification(X10)
- TV sync. separator circuit for stable TV signal observation
- 400V maximum. input voltage



OS-5020G 200MHz 2ch dual trace Bult-in 1MHz function generator

- DC to 20MHz, 2CH - dual trace
- Built - in 1MHz function generator with TTL output
- CH2 polarity inversion switch
- High sensitivity X - Y mode
- Vertical deflection magnification, X5
- Sensitivity : 1mV / div
- Variable hold - off for observation of wave forms with complex periods
- Employment of TV sync. separator circuit allows the instrument to observe TV signals stably
- Sweep magnification, X5

Specifications

SPEC \ MODEL		OS-5030	OS-5020	OS-5020G
CRT	Configuration and Useful Screen	6-inch rectangular screen with internal graticule : 8 ×10Div (1 Div = 1cm), marking for measurement of rise time, 2mm subdivisions along the central axis.		
	Accelerating Potential	+1.9kv approx.(ref. cathode)		
	Phosphor	P31		
	Focussing	Possible		
	Trace Rotation	provided		
	Intensity Control	provided		
Z-AXIS INPUT (INTENSITY MODULATION)	Input Signal	Positive going signal decreases +5Vp-p or more signal cases intensity noticeable at normal intensity settings.		
	Bandwidth	DC to 2MHz(-3dB)		
	Coupling	DC		
	Input Impedance	20k Ω - 30k Ω typical		
	Maximum Input Voltage	30V (DC+peak AC)		
VERTICAL DEFLECTION	BandWidth(-3dB) DC coupled	DC to 30MHz normal / DC to 10MHz magnified(CH1 only)	DC to 20MHz normal / DC to 10MHz magnified(CH1 only)	DC to 20MHz normal(×1)DC to 7MHz magnified(×5)
	BandWidth(-3dB) AC coupled	10Hz to 30MHz normal/ 10Hz to 10MHz magnified(CH1 only)	10Hz to 20MHz normal / 10Hz to 10MHz magnified(CH1 only)	10Hz to 20MHz normal(×1)10Hz to 7MHz magnified(×5)
	Modes	CH1, CH2, ADD, DUAL, (CHOP, Time/Div swich-0.2s to 1ms, ALT;Time / Div swich-0.5ms to 0.2μs)		CH1, CH2, ADD, DUAL, (CHOP, Time / Div swich-0.2s to 5ms, ALT;Time / Div swich-2ms to 0.2 μs)
	Deflection Factor	5mV/Div to 20V / Div in 12 calibrated steps of a 1-2-5 squence. Continuously variable between steps at least 1:2.5 ×5		5mV/Div to 5V/Div in 10 calibrated steps of or 1-2-5 squence. Continuously variable between steps at least 1:2.5 ×5
		5MAG:1mV/Div to 4V/Div in 12 calibrated steps.(CH1 only)		MAG:1mV / Div to 1V/Div in 10 calibrated steps.
	Accuracy	normal : ±3%, magnified : ±5%(CH1 only)		normal : ±3%, magnified : ±5%
	Input Impedance	approx : 1M Ω in parallel with 30pF		approx : 1M Ω in parallel with 25pF
	Maximum input Voltage	Direct : 400V(DC+peak AC)		Direct : 250V(DC+peak AC)
	Input Coupling	AC - GND -AC		
	Rise Time	12ns or less (35ns or less : ×5 MAG)	17.5ns or less (35ns or less : ×5 MAG)	17.5ns or less (50ns or less : ×5MAG)
	CH1 OUT	25mV/Div into 50 Ω: 10Hz to 10MHz (-3dB)		25mV / Div into 50 Ω: DC to 10MHz (-3dB)
	Polarity Inversion	CH2 only		
HORIZONTAL DEFLECTION	Display Modes		normal. X-Y, X10, Variable	X1, X10, X-Y
	Time Base A	0.2 μs / Div to 0.2s / Div in 19 calibrated steps of 1-2-5 sequence uncalibrated continuous control between steps at least 1:2.5		
	Hold-off Time			Variable with the hold-off control
	Sweep Magnification	10 times (maximum sweep rate: 20ns /Div) Note: 50ns / 20ns / Div(ı 10%)		10 times (maximum sweep rate: 20ns / Div) Note: 50ns / Div off A Time base are uncalibrated
	Accuracy	ı 3%(0℃ to 35℃), 5% (0℃~10℃ ~ 35~40℃) additional error for magnifier ±2%		ı 3%, 5% (0℃ to 40℃) additional error for magnifier ±2%
TRIGGER SYSTEM	Modes	Auto, Norm, TV-V, TV-H		
	Source	VERT(Dual, ALT)CH1, CH2, LINE, EXT		CH1, CH2, LINE, EXT
	Coupling	AC		
	Slope	+or -		
	Sensitivity and Frequency AUTO, NORM			
	TV-V, TV-H	at least 1 Div or 1.0Vp-p		
	External Trigger Input impedance	1M Ω ±10%		1M Φin parallel with approx.25pF
	Maximum Input Voltage	400V(DC + AC peak)		250V(DC + AC peak)
X-Y OPERATION	Sensitivity	same as vertical deflection for both, X-axis(CH1)and Y-axis(CH2) (except for the following : Accuracy; ±5%(X-axis)		
	X - axis Bandwidth	DC to 500kHz(-3dB)		
	X - Y Phase Difference	3° or less (at DC to 50kHz)		
CALIBRATOR	Probe Adjustment	Approx, 1kHz frequency(±20%), 0.5V(±10%) square wave duty ratio: 40-60%		Approx, 1kHz frequency 0.5Vp-p(±3%) square wave duty ratio:50%
FUNCTION GENETATOR	Frequency Range			0.1Hz to 1MHz(7 range)
	Output Waveform			sine, triangle, square, TTL pulse
	Frequency Stability			±0.5%(1/10/100/1K/10K/100K range) ±1%(1M range) 15 minutes later after power on
POWER SUPPLY	Line Voltage Range			
	Line Frequency	50/60Hz		
	Power Consumption	approx. 45W		Approx. 50W
PHYSICAL CHARACTERISTICS	Weight	7.8kg		7.4kg
	Size	316mm(W) ×132mm(H) ×410mm(L)		320mm(W) ×140mm(H) × 430mm(L)
OTHERS	Accessories Supplied	Operator's manual 1, Spare fuse2, Power cord1, Probe(option)2		

	20Hz - 2MHz (VERT)	2MHz - 20MHz (VERT)	20MHz - 30MHz(VERT)
INT	0.5Div(2Div)	1.5Div(3Div)	2.5Div(4Div)
EXT	0.2Vp-p	0.6Vp-p	1.0Vp-p

	20Hz - 2MHz (VERT)	2MHz - 20MHz (VERT)
INT	0.5Div(2Div)	1.5Div(3Div)
EXT	0.2Vp-p	0.6Vp-p

	20Hz - 2MHz (VERT)	2MHz - 20MHz (VERT)
	0.5Div	1.5Div
	0.2Vp-p	0.8Vp-p

Voltage Range	FUSE(250V)	
	UL198G	IEC127
115(98-125V)/AC	1.25A	1.25A
230V(198-250V)/AC	0.63A	0.63A

Voltage Range	FUSE(250V)	
	UL198G	IEC127
100V(90-110V)/AC	2A	F2A
120V(108-132V)/AC		
220V(198-242V)/AC	1A	F1A
230V(207-250V)/AC		