

## CA620/CA630 (T/FG) SERIES DUAL CHANNEL OSCILLOSCOPE



**COMPONENT TEST FUNCTION CA620T/CA630T  
BUILT-IN DDS FUNCTION GENERATOR CA620FG/CA630FG**

CA620FG

### Features:

- 20MHz/30MHz dual channel series
- High luminance, internal graticule CRT
- X10 sweep magnification
- ALT triggering function
- Electronic rotary encoder for sweep switch
- Trigger hold off adjusting (CA620T/CA630T only)
- Component test function (CA620T/CA630T only)
- Built-in DDS function generator (CA620FG/CA630FG only)
- TV synchronizing, X-Y mode operation
- Wide input level range up to 20V/DIV
- 1mV/DIV high sensitivity (X5 MAG)
- Triggering level lock function, automatic synchronizing function
- Z-Axis input
- CH1 output
- Ideal for educational purpose

### Specifications

		CA620/CA620T/CA620FG	CA630/CA630T/CA630FG
CRT	Type	6" rectangle, internal graticule, 0%, 10% 90% and 100% marks	
	Display Area	8 x 10DIV (1DIV=10mm)	
VERTICAL SYSTEM	Accelerating Voltage	2kV	
	Intensity and Focusing	Continuously adjustable at front panel	
	Trace Rotation	Adjustable at front panel	
	Sensitivity and Accuracy	5mV/DIV ~ 20V/DIV +/-3% (X5MAG: 1mV/DIV~4V/DIV +/-5%), 12 calibrated steps in 1-2-5 sequence	
	Vernier Vertical Sensitivity	Continuously variable to 1/2.5 or less than panel indicate value	
HORIZONTAL SYSTEM	Band Width(-3dB)	DC ~ 20MHz	DC ~ 30MHz
	Rise Time	Approx. 17.5ns	
	Input Impedance	Approx. 1MOhm /25pF	Approx. 12ns
	Vertical Operation Mode	CH1/ CH2 / DUAL (ALT/CHOP)/ ADD/ CH2 Inverse	
	Input Coupling	AC/GND/DC	
TRIGGER SYSTEM	Max. Input Voltage	400Vpeak at 1kHz or less	
	Sweep Time	0.2 μs - 0.5s/DIV 20 steps in 1-2-5 sequence	
	Sweep Accuracy	+/-3%, +/-5% at X10 MAG	
	Trimming Ratio	≤ 1/2.5 of panel indicated value	
	Sweep Magnification	X 10 MAG	
X-Y MODE OPERATION	Mode	AUTO/NORM/TV-V/TV-H	
	Trigger Level Lock	Yes	
	Source	CH1/CH2/VERT/EXT/LINE	
	Trigger Slope	"+" or "-"	
	Trigger Sensitivity	INT	5MHz ~ 10MHz: 1DIV 10MHz ~ 20MHz: 1.5DIV
Z-AXIS INPUT	EXT	5MHz ~ 10MHz: 0.2V 10MHz ~ 20MHz: 0.3V	5MHz ~ 10MHz: 0.2V 10MHz ~ 30MHz: 0.4V
	External Trigger Input	TV SYNC pulse > 2DIV (EXT: 0.5V) Input impedance: Approx. 1MOhm / 25pF Max. input voltage: 400V (DC + ACpeak); AC frequency < 1kHz	
	Input	X-axis: CH1, Y-axis: CH2	
	Sensitivity	Same as vertical axis	
	Band Width(-3dB)	Axis X: DC ~ 500kHz	
OUTPUT SIGNAL	Phase Difference	≤ 3° from DC to 50kHz	
	CH1 Output	At least 20mV/DIV into a 50 Ohm termination, 50Hz ~ 5MHz	
COMPONENT TEST		Only for CA620T/CA630T	
DDS SIGNAL OUTPUT (only for CA620FG/CA630FG)	Waveforms	Sine, square, triangle	
	Frequency Range	0.1Hz ~ 2MHz (7 ranges)	
	Output Voltage	≥ 20Vpp (open)	
	Output Impedance	50Ohm +/-10%	
	DC Offset	+/- 10V (open)	
	Sine Wave Distortion	< 0.2% (20Hz ~ 20kHz)	
CALIBRATION	Square Wave Rise/Fall Time	< 50nS	
	Signal	Positive going square wave at 1kHz (2Vpp +/-2.0%)	
	Duty Cycle	48:52	
POWER SOURCE	Output Impedance	Approx. 1kOhm	
		AC110V/220 +/-10%, 50/60Hz	