TRIO CS-1040 Oscilloscope Specifications	
CRT	150JTM31 Rectangular , with internal graticule
Acceleration Voltage	12 KV
Display Area	8 x 10 DIV (1 DIV = 10 mm)
VERTICAL AXIS	**CH1 and CH2**
Sensitivity	1 mV/div to 5 V/div , ± 3%
Attenuator	12 steps , 1 mV/div to 5 V/div in 1-2-5 sequence. Vernier control for fully adjustable sensitivity between steps
Input Impedance	1 MΩ ± 2% , approx. 20 pF
Frequency Response	
5 mV /div to 5 V/div	DC ; DC to 40 MHz , -3dB AC ; 5Hz to 40 MHz , -3dB
1 mV/div , 2 mV/div	DC ; DC to 15 MHz , -3dB AC ; 5Hz to 15 MHz , -3dB
Rise Time	8.8 nSec or less (40 MHz) 23.4 nSec or less (15 MHz)
Signal Delay Time	Approx. 20 nsec on the CRT screen
Cross Talk	-40 dB minimum
Operating Modes	CH1 ; single trace CH2 ; single trace ADD ; CH1 + CH2 added as a single trace DUAL ; CH1 and CH2 , dual trace TRIPLE ; CH1 , CH2 and CH3 triple trace ALT ; dual trace or triple trace , alternating CHOP ; dual or triple trace chopped
Chop Frequency	Aprox. 250 KHz
Channel Polarity	Normal or Inverted , channel 2 only inverted
Maximum Input Voltage	500 Vp-p or 250 V (DC + AC peak)
Non-Distorted Maximum Amplitude	More than 8 div (DC to 40 MHz)
VERTICAL AXIS	**CH3**
Sensitivity	0.1 V/div and 1 V/div ± 3%
Input Resistance	1 MΩ ± 2%
Input Capacitance	Approx . 27 pF
Frequency Response	DC ; DC to 40 MHz , -3dB AC ; 5Hz to 40 MHz , -3dB
Rise Time	8.8 nSec or less
Signal Delay Time	Same as CH1 and CH2
Maximum Input Voltage	50 V (DC + AC peak)
HORIZONTAL AXIS	**Input thru CH2 ,** x 10 MAG not included
Operating Modes	With HORIZ DISPLAY switch X-Y operation selectable CH1 ; Y axis CH2 ; X axis
Sensitivity	Same as Vertical axis (CH2)
Input Impedance	Same as Vertical axis (CH2)
Frequency Response	DC ; DC to 1 MHz , -3dB AC ; 5Hz to 1 MHz , -3dB
X - Y Phase Difference	3 º or less at 100 KHz
Maximum Input Voltage	Same as vertical axis (CH2)

SWEEP								
Type		A : A sweep ALT : A sweep (intensified for duration of B seep (delayed Sweep) alternating. INT : Duration of B seep is displayed as an intensified portion of A sweep. B : Delayed Sweep X – Y : oscilloscope						
Sweep Time	A	0.1 μS/div to 0.5 s/div , ± 3% in 21 ranges in 1-2-5 sequence.						
	B	0.1 μs/div to 50 ms/div , ± 3% in 18 ranges , in 1-2-5 sequence						
Sweep Magnification		X 10 (ten times) ± 5 %						
Linearity		± 3 % all ranges ± 5% on 0.05 μs/div to 0.1 μs/div range at x 10 MAG						
Holdoff		Continuously variable from NORM to more than ten times (MAX)						
Trace Separation		B Sweep can be separated from A Sweep up to 4 divisions,						
Delay Method		Continuously delay (START AFTER DELAY) , Trigger delay (TRIG)						
Delay Time		From 100 nSec to 0.5 sec . Available delay time is 0.2 to 10 times						
Time Difference Measurement Accuracy		± 2%						
Delay Jitter		1/20000 of ten times of A Sweep time setting						
TRIGGERING								
Trigger mode		AUTO , NORM , FIX , SINGLE						
Trigger Source		V. MODE : Trigger selected by vertical MODE switch CH1 : Triggered by CH1 signal CH2 : Triggered by CH2 signal CH3/EXT : Triggered by CH3 signal LINE : Triggered by the line voltage						
Coupling		AC , Hfrej , DC , VIDEO FRAME , VIDEO LINE						
Trigger Sensitivity		FREQ. RANGE	INT	EXT	FREQ.RANGE	INT	EXT	
	DC	DC~60 MHz	1 div	0.1 Vp-p	DC~40 MHz	1 div	0.1 Vp-p	
	AC	Same as for DC but increased minimum level below 10 Hz						
	AC , HF rej	Increased minimum level below 10 Hz and or above 20 KHz						
	VIDEO	FRAME,LINE	1 div	0.1 Vp-p	FRAME,LINE	1 div	0.1 Vp-p	
		AUTO : Same as above specifications for above 50 Hz FIX : Same as above specifications for above 50 Hz						

PROBE ADJ. VOLTAGE	0.5 V , ± 6% , square wave , positive polarity , approx. 1 KHz
INTENSITY MODULATION	
Sensitivity	TTL compatible positive voltage increases brightness , negative
Input Impedance	Approx. 10 KΩ
Usable Frequency Range	DC to 3.5 MHz
Maximum Input Voltage	50 V (DC + AC peak)
VERTICAL AXIS SIGNAL OUTPUT	CH1 OUTPUT
Output Voltage	Approx. 50 mV/div into 50 Ω
Output Impedance	Approx. 50 Ω
Frequency Response	
5 mV/div to 5 V/div	100 KHz to 40 MHz , - 3dB into 50 Ω
1 mV/div , 2 mV/div	100 KHz to 15 MHz , - 3dB into 50 Ω
GATE OUTPUT	
Output Voltage	TTL Compatible
Output Impedance	Approx. 220 Ω
SWEEP OUTPUT	
Output Voltage	1 Vp-p
Output Impedance	Approx. 1 KΩ
POWER REQUIREMENT	
Power Supply	100 V / 120 V / 220 V / 240 V ± 10%
Line Frequency	50/60 Hz
Power Consumption	Approx. 65 W
DIMENSIONS (W x H x D)	304 (346) x 160 (173) x 401 (461) mm
WEIGHT	Approx. 11 Kg
ENVIRONMENTAL	
Within Specifications	10 ºC to 35 ºC , 85% max. Relative humidity
Full Operation	0 ºC to 50 ºC , 90% max. Relative humidity
ACCESORIES SUPPLIED	
Probe	PC-20 x 2
Spare Fuse	2 A x2
	1 A x2
Instruction Manual	1

* Circuit and rating are subject to change without notice due to development in technology