100MHz CURSOR READOUT ANALOG OSCILLOSCOPE

The GOS-6100 Series Analog Oscilloscope satisfies the massive needs in diverse professional applications up to 100MHz bandwidth. The advanced Time Base Auto-range function acquires the waveform at the pushbutton convenience (GOS-6103/6103C only). Embedded with Delay Sweep and Hold Off features, the GOS-6100 Series is capable of measuring sophisticated signals. The Cursor Readout with 7 measurements, Panel Setup Save/Recall (GOS-6103/6103C only), and the built-in 6 Digit Universal Counter (GOS-6103C only) all make waveform observation and measurement easier, faster and more accurate.

GOS-6112/6103/6103C (100 MHz)

CE CURSOR Readout GOS-6103C Without CE Approved

FEATURES

* 100MHz Bandwidth, Dual Channel, Delayed Sweep
* Built-In 6 Digit Universal Counter (GOS-6103C)
* 10 Sets Memory for Front Panel Setting Save & Recall (GOS-6103/GOS-6103C)
* Time Base Auto-range (GOS-6103/GOS-6103C)
* Cursor Readout with 7 Measurements
* Panel Setup Lock of Digital-Control Functions
* Buzzer Alarm
* LED Indicators
* TV Synchronization
* Trigger Signal Output
* Z-Axis Modulation Input
* SMD Technology, High Stability and Reliability

CURSOR MEASUREMENT FUNCTIONS

The unique easy-to-use cursor and numerical readouts make waveform observation and measurement easier, faster and more accurate. The on-screen cursors provide seven measurement functions (ΔV,ΔV%,ΔVdB,Δ T, 1/Δ T,T%,Δθ)

SPECIFICATIONS

CRT

Type	6-inch rectangular type with internal graticule; 0%, 10%, 90% and 100% markers 8 x 10 div (1 div = 1 cm)
Accelerating Potential	16 kV approx. (GOS-6103/GOS-6103C), 12kV approx. (GOS-6112)
Illumination	Continuously adjustable (GOS-6103/GOS-6103C)
Z-axis input	Coupling : DC Sensitivity: 5V or more Maximum input voltage : 30V (DC + AC peak) at 1kHz or less Bandwidth : DC ~ 5 MHz

VERTICAL SYSTEM

Sensitivity	2mV~5V/div, 11 step in 1-2-5 sequence
Sensitivity Accuracy	≤3% (5div at the center of display)
Vernier Vertical Sensitivity	Continuously variable to 1/2.5 or less of panel-indicate value
Bandwidth(-3dB)	DC~100MHz(2mV/div:DC~20MHz)
Rise Time	3.5ns (2mV/div:17.5ns)
Signal Delay	Leading edge can be monitored
Max. Input Voltage	400V(DC+AC peak) at 1kHz or less
Input Coupling	AC, DC, GND
Input Impedance	1MΩ ±2% // approx. 25pF
Vertical Mode	CH1,CH2,DUAL(CHOP/ALT), ADD, CH2 INV.
Bandwidth Limited	20MHz
Common-Mode Rejection Ratio	50:1 or better at 50kHz
Dynamic Range	8 div at 60MHz; 5div at 100MHz (GOS-6112) 8 div at 100MHz (GOS-6103/GOS-6103C)

HORIZONTAL SYSTEM

Horizontal Modes	MAIN(A), ALT, DELAY(B)
A(main) Sweep Time	50ns~0.5s/div, continuously variable (UNCAL)
B(delay) Sweep Time	50ns~50ms/div
Accuracy	±3% (±5% at x 10 MAG)
Sweep Magnification	x 10 (maximum sweep time 5nS/div)
Hold Off Time	Variable
Delay Time	1 μs~5s
Delay Jitter	Better than 1:20000
Alternate Separation	Variable

TRIGGER

Trigger Modes	AUTO, NORM,TV
Trigger Source	CH1,CH2,LINE,EXT
Trigger Coupling	AC,DC,HFR,LFR
Trigger Slope	"+" or "-" polarity or TVsync polarity
Trigger Sensitivity	(see table below)
TV sync	TV-V, TV-H
Max. External Input Voltage	400V(DC+AC peak) at 1kHz
External Input Impedance	1M ±5% // approx.25pF

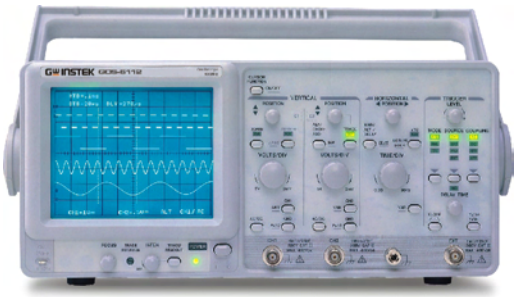
Mode	Frequency	INT	EXT
AUTO	10 Hz ~ 20 MHz 20 MHz ~ 100 MHz	0.35 div 1.5 div	50 mV 150 mV
NORM	DC ~ 20 MHz 20 MHz ~ 100 MHz	0.35 div 1.5 div	50 mV 150 mV
TV	sync signal	1 div	200 mVpp

X-Y OPERATION

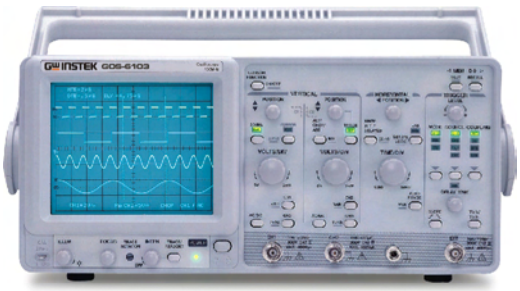
Mode	X-axis: selectable CH1, CH2, EXT ; Y-axis: selectable CH1, CH2, CH1 and CH2
Sensitivity Accuracy	2mV~5V/div±3% ; EXT : 0.1V/div ±5%
X-axis Bandwidth	DC~500kHz(-3dB)
Phase Error	3° or less from DC~50kHz

OUTPUT SIGNAL

Trigger Signal Output	Voltage: approx. 25mV/div into 50Ω ; Frequency response : DC ~ 10MHz
Calibrator Output	1kHz Square wave, 2Vpp ± 2%



GOS-6112



GOS-6103/6103C

SPECIFICATIONS

CURSOR READOUT FUNCTION	
Cursor Measurement Function	ΔV, ΔV%, ΔVdB, ΔT, 1/ΔT, ΔT%, Δθ
Cursor Resolution	1/100 div
Effective Cursor Range	Vertical: ±3div ; Horizontal: ±4 div
Panel Setting Display	Vertical: V/div(CH1,CH2),UNCAL,ALT/CHOP/ADD,INV, probe factor,AC/DC/GND Horizontal: s/div(MTB, DTB), UNCAL, x 10MAG, delay time , Hold-off Trigger: source, coupling, slope, level, TV-V, TV-H Others: X-Y, lock, save/recall MEM 0-9 (GOS-6103/GOS-6103C)
AUTO MEASUREMENT FUNCTION (GOS-6103C)	
Parameter Function	FREQ, PERIOD, ±WIDTH, ±DUTY (+ or - polarity selected by trigger slope)
Display Digits	Max. 6-digits, decimal
Frequency Range	50Hz ~ 100MHz
Accuracy	1kHz ~ 100MHz : ±0.01% ; 50Hz ~ 1kHz : ±0.05%
Measuring Sensitivity	> 2 div (Measuring source selected from CH1 and CH2 as synchronous signal sources)
SPECIAL FUNCTION	
TIME/DIV Auto Range	Provided (GOS-6103/GOS-6103C)
Panel Setting Save & Recall	10 sets (GOS-6103/GOS-6103C)
Panel Setups Lock	Provided
POWER SOURCE	
AC 100V/120V/230V±10% , 50/60Hz	
DIMENSIONS & WEIGHT	
310(W) x 150(H) x 455(D) mm ; Approx. 9kg	

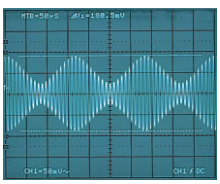
ORDERING INFORMATION

GOS-6112 100MHz, 2-channel, Analog Oscilloscope
GOS-6103 100MHz, 2-channel, Analog Oscilloscope
GOS-6103C 100MHz, 2-channel, Analog Oscilloscope with 100MHz Frequency Counter

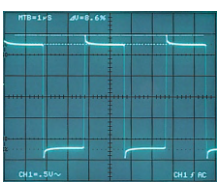
ACCESSORIES :
User manual x 1; Power cord x 1; GTP-100A Probe x 2

Optional Accessories

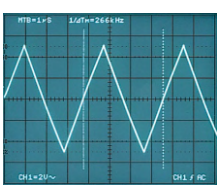
GTC-001 Instrument Cart, 450(W) x 430(D) mm (120V Input Socket)
GTC-002 Instrument Cart, 330(W) x 430(D) mm (120V Input Socket)



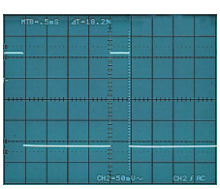
Voltage Measurement



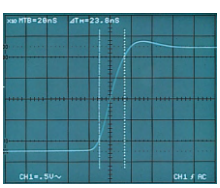
Voltage percentage Measurement



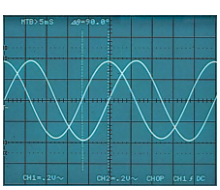
Frequency Measurement



Time percentage Measurement



Time Measurement



Phase Measurement