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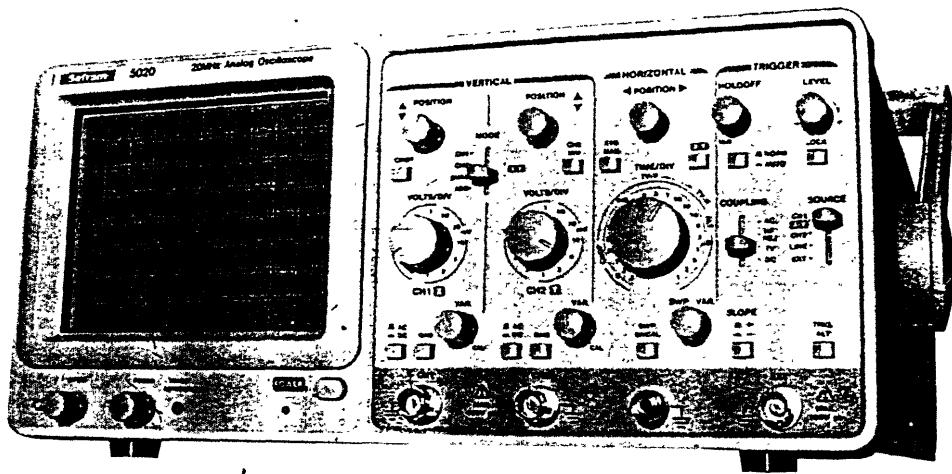
**SEFRAM 5020**  
20 MHz Analogue Oscilloscope

**Sefram**

# Discover an oscilloscope with a new and unique standard of **QUALITY/PRICE.**

## Capabilities

- 20 MHz, dual channel
- High sensitivity 1 mV/Div.
- CH1 output
- TV, ALT triggering functions
- Z axis input
- HOLD OFF function



**SEFRAM 5020**

## An analogue oscilloscop for everyday use

In many equipment service and educational applications, it is important to view signals in real-time without analogue-to-digital conversion or storage delays. Today, only an analogue oscilloscope can meet these requirements. With the model SEFRAM 5020, Sefram offers a unique solution that features high performance at an affordable price.

## Ease-of-use, performance and price

The SEFRAM 5020 oscilloscope features a 20 MHz bandwidth and a time base range to 50 ns/div. It has a built-in 1 kHz fast rise-time calibration signal to enable the compensation of high quality probes to be adjusted precisely. In dual channel operation, the oscilloscope automatically selects between CHOP and ALTernative operating modes depending on the time-base range setting. The competitively priced, high quality and easy-to-use oscilloscope for everyday applications.

**SEFRAM 5020**  
20 MHz Analogue Oscilloscope

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**TECHNICAL SPECIFICATION**

<b>SEFRAM 5020</b>	
<b>VERTICAL SYSTEM</b>	Sensitivity/ Accuracy
	5 mV/ Div. - 5 V/ Div. / $\pm 3\%$
	1 mV/ Div. - 2 mV/ Div. / $\pm 5\%$
Bandwidth	DC (AC 10 Hz) - 20 MHz (-3 dB)
	DC (AC 10 Hz) - 10 MHz (-3 dB) at 1 - 2 mV/ Div.
Rise time	17.5 ns (35 ns at 1 mV - 2 mV/ Div.)
Input impedance	1 M $\Omega$ $\pm 2\%$ // approx. 25 pF
Input coupling mode	AC, DC, GND
Polarity	CH2 only
Display mode	CH1, CH2, DUAL, ADD (ALT and CHOP automatic, CHOP lockable)
CHOP Frequency	Approx. 250 kHz
CH1 output signal	50 mV/Div. into 50 $\Omega$
<b>HORIZONTAL SYSTEM</b>	Sweep time/ Accuracy
	0.1 ms - 0.5 s/ Div. / $\pm 3\%$
	100 ns - 50 ms/Div. / $\pm 5\%$ (x10 MAG)
	10 ns - 50 ns/Div. / $\pm 8\%$ (x10 MAG)
Expansion	x 10
Modes	AUTO, NORM
Trigger source	CH1, CH2, ALT, LINE, EXT
Trigger coupling	AC, DC, HF REJ, TV
Trigger slope	positive or negative
<b>X-Y OPERATION</b>	Sensitivity
	5 mV - 5 V/ Div. $\pm 4\%$
Bandwidth	DC - 1 MHz
Phase difference	< 3° (DC - 50 kHz)
<b>Z AXIS</b>	Input impedance
	Approx. 5 k $\Omega$
Sensitivity	> 3 Vp-p
Frequency response	DC - 5 MHz

**GENERAL SPECIFICATION**

<b>SEFRAM 5020</b>	
Calibrator	1 kHz square wave, 2 Vp-p $\pm 2\%$
CRT	6 inch, rectangular, with internal graticule
Screen	8 x 10 DIV (1 Div. = 10 mm)
Accelerating voltage	2.2 KV
Power source	AC 100V/ 120V/ 220V/ 230V $\pm 10\%$ , 50/60 Hz, Approx. 70 VA (max.)
Safety	IEC 1010, Cat. II, 300 V
Dimensions & Weight	310 x 150 x 455 mm; 8.2 kg
Warranty	2 years

**SUPPLIED WITH**

All SEFRAM 5020 oscilloscopes are supplied with a power cord and a user's manual

**OPTIONAL ACCESSORIES**

- GE 1521 - Probe for oscilloscope (1/1, 1/10, 150 MHz)
- GE 3121 - Probe for oscilloscope (1/100, 200 MHz, 2 kV)
- GE 8100 - Differential probe
- SO 401 - BNC m./ 2 x BNC f. adaptor
- SO 402 - Isolated BNC m./ 2 x banana plugs adaptor
- SO 405 - 50  $\Omega$ , 2 W Load
- SO 410 - BNC/BNC Cable (1m, black)

**GE 8100 - DIFFERENTIAL PROBE**

Bandwidth	30 MHz
Voltage common mode	700 V
Attenuation	x 20, x 200
Accuracy	$\pm 3\%$
Rise time	12 ns
Auto-power off	10 min
Power requirements	9V battery (battery life .20h)
Dimensions	157 x 50 x 26 mm
Cable length	50 cm
Safety	IEC 1010, Cat III
Warranty	1 year

To discover the complete range of accessories, contact us and ask for the ELDITEST catalog.

Specifications subject to change without notice- FT502000A/97

**Sefram**



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**For assistance and ordering**