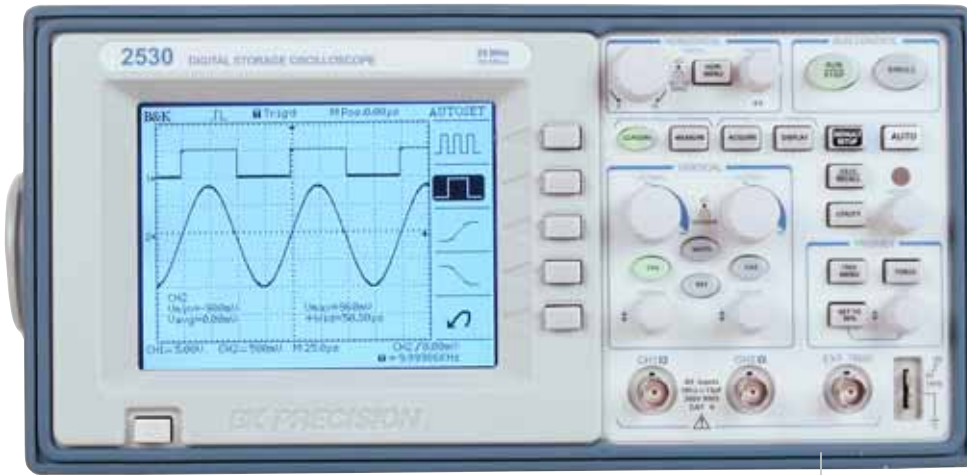


# DIGITAL OSCILLOSCOPES

## 25MHz Digital Sampling Oscilloscope, 2 channels



BK 2530

2008  
**NEW**

**25 MHz**  
**200 Ms/s**  
**2 CHANNELS**

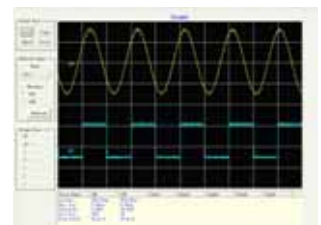
### Capabilities

- 25MHz bandwidth, 2 channels
- Vertical resolution: 8 bit
- Sampling rate: 250Ms/s and 50Gs/s in ETS
- Memory: 4K per channel
- 11 automatic measurement
- B&W LCD display
- USB interface
- Automatic calibration

Technical Specification	BK2530
Number of channels	2
Vertical Mode	
Bandwidth (-3dB)	25MHz
Resolution	8 bit
Sensitivity	2mV/div to 5V/div
Rise time	<14ns
Coupling	AC, DC, GND
Input impedance	1M ohms //13pF
Horizontal Mode	
Time base	2,5ns to 50s /div
Display	window, roll, XY, zoom
Acquisition	
Sampling rate	250Ms/s
Memory (per channel)	4000 samples
ETS sampling rate	50Gs/s
Mode	single, peak, average
Trigger	
Source	CH1, CH2, Line, Ext, Etx/5
Mode	Auto, normal, single, TV (with line selection), pulse, edge"
Coupling	AC, DC, LF reject, HF reject
XY	yes
Automatic measurement	11 measurements, with FFT and Go-No-Go mode
Cursors	dV, dT, 1/dT
Counter	6 digit, DC coupling
Autoset	yes
Memory	10 setup, 10 curves and 2 reference curve
Autocalibration	yes
External Trigger	yes, with BNC on front panel
Interfaces	
USB	yes, EasyScope for Windows TM software
<b>GENERAL SPECIFICATION</b>	
Display	LCD, N&B 320x240
Grid	8x10div
Power supply	100 - 240V / 45-440Hz (50VA max.)
Safety	IEC1010, Cat II -300V
Dimension, weight	290x150x300mm - 4,6 Kg

Optional accessories : see page 54, 55, 56, 57.

The included Easyscope software provides seamless integration between oscilloscope and PC. Capture and transfer waveforms, screen images, setups and measurement results to a Windows® PC via the USB device port on the back of the instrument. Save waveform data in csv (Microsoft Excel®) for post acquisition analysis.



# DIGITAL OSCILLOSCOPES

## 2 channels compact DSO, from 40MHz to 100MHz



Sefram 5342DC

40 MHz  
250 MS/s  
2 CHANNELS

### Capabilities

- 2 channels
- Vertical resolution: 8 bit
- Sampling rate: 250Ms/s and 50Gs/s in ETS
- Memory: 4K per channel
- 19 automatic measurement
- Colour LCD display
- USB interface
- SD-CARD interface



Sefram 5362DC

60 MHz  
250 MS/s  
2 CHANNELS



Sefram 5382DC

100 MHz  
250 MS/s  
2 CHANNELS

Technical Specification	5342DC	5362DC	5382DC
Number of channels	2	2	2
<b>Vertical mode</b>			
Bandwith (-3dB)	40MHz	60MHz	100MHz
Resolution	8 bits	8 bits	8 bits
Sensibility	2mV/div to 5V/div	2mV/div to 5V/div	2mV/div to 5V/div
Rise time	<8,75ns	<5,8ns	<3,5ns
Coupling	AC, DC, GND	AC, DC, GND	AC, DC, GND
Input impedance	1M ohms //16pF	1M ohms //16pF	1M ohms //16pF
<b>Horizontal mode</b>			
Time bas	1ns à 10s /div	1ns à 10s /div	1ns à 10s /div
Display	window, roll, XY	window, roll, XY	window, roll, XY
<b>Acquisition</b>			
Sampling rate	250Ms/s	250Mech/s	250Mech/s
Memory (per channel)	4Kwords	4Kwords	4Kwords
ETS sampling rate	25Gs/s	25Gs/s	25Gs/s
Mode	single, peak, average	single, peak, average	single, peak, average
Average	2, 4, 8, 16, 32, 64, 128, 256	2, 4, 8, 16, 32, 64, 128, 256	2, 4, 8, 16, 32, 64, 128, 256
<b>Trigger</b>			
Mode	Auto, normal, single, TV, pulse, edge	Auto, normal, single, TV, pulse, edge	Auto, normal, single, TV, pulse, edge
Coupling	AC, DC, LF, HF, noise rejection	AC, DC, LF, HF, noise rejection	AC, DC, LF, HF, noise rejection
XY	yes	yes	yes
Automatic measurement	19 measurement, with FFT	19 measurement, with FFT	19 measurement, with FFT
Cursors	dV, dT, 1/dT	dV, dT, 1/dT	dV, dT, 1/dT
Counter	6 digits	6 digits	6 digits
Autoset	yes	yes	yes
Memory	15 setup and curves	15 setup and curves	15 setup and curves
Autocalibration	yes	yes	yes
External Trigger	yes	yes	yes
<b>Interfaces</b>			
USB	yes, USB1.1 & 2.0 (device)	yes, USB1.1 & 2.0 (device)	yes, USB1.1 & 2.0 (device)
SD Card	yes, for screen image, files and setup	yes, for screen image, files and setup	yes, for screen image, files and setup
<b>GENERAL SPECIFICATION</b>			
Display	TFT LCD coloured 320x234	TFT LCD coloured 320x234	TFT LCD coloured 320x234
Menus	french and english	french and english	french and english
Grid	8x10div	8x10div	8x10div
Power supply	100 - 240V / 48-63Hz (25VA max.)	100 - 240V / 48-63Hz (25VA max.)	100 - 240V / 48-63Hz (25VA max.)
Safety	IEC1010, Cat II -300V	IEC1010, Cat II -300V	IEC1010, Cat II -300V
Dimensions, Weight	140x142x310mm - 2,5 Kg	140x142x310mm - 2,5 Kg	140x142x310mm - 2,5 Kg

Optional accessories : see page 54, 55, 56, 57.

# DIGITAL OSCILLOSCOPES

## 2 channels DSO, from 60MHz to 200MHz



Sefram 5062DC

60 MHz  
1GS/s  
2 CHANNELS

### Capabilities

- 8 bit vertical resolution
- Sampling rate 1Gs/s and 25Gs/s (ETS mode)
- 25K memory per channel
- 27 automatic measurements and Go-No-Go mode
- Colour TFT LCD
- Detailed on screen help
- USB 2.0 (Host) interface and RS-232
- GPIB interface (factory option)



Sefram 5160DC

100 MHz  
1GS/s  
2 CHANNELS



Sefram 5260DC

200 MHz  
1GS/s  
2 CHANNELS

Technical Specification	5062DC	5160DC	5260DC
Number of channels	2	2	2
<b>Vertical Mode</b>			
Bandwidth (-3dB)	60MHz	100MHz	200MHz
Resolution	8 bit	8 bit	8 bit
Sensitivity	2mV/div to 5V/div	2mV/div to 5V/div	2mV/div to 5V/div
Rise time	<5,8ns	<3,5ns	<1,75ns
Coupling	AC, DC, GND	AC, DC, GND	AC, DC, GND
Input impedance	1M ohms //16pF	1M ohms //16pF	1M ohms //16pF
<b>Horizontal Mode</b>			
Time base	1ns to 10s /div	1ns to 10s /div	1ns to 10s /div
Display	window, roll, XY	window, roll, XY	window, roll, XY
<b>Acquisition</b>			
Sampling rate	1Gs/s	1Gs/s	1Gs/s
Memory (per channel)	25Kwords	25Kwords	25Kwords
ETS sampling rate	25Gs/s	25Gs/s	25Gs/s
Mode	single, peak, average	single, peak, average	single, peak, average
<b>Trigger</b>			
Mode	Auto, normal, single, TV, delayed event, pulse, edge	Auto, normal, single, TV, delayed event, pulse, edge	Auto, normal, single, TV, delayed event, pulse, edge
Coupling	AC, DC, LF, noise rejection	AC, DC, LF, noise rejection	AC, DC, LF, noise rejection
XY	yes	yes	yes
Automatic measurement	27 measurements, with FFT	27 measurements, with FFT	27 measurements, with FFT
Cursors	dV, dT, 1/dT	dV, dT, 1/dT	dV, dT, 1/dT
Counter	6 digit	6 digit	6 digit
Autoset	yes	yes	yes
Memory	20 setup, 24 curves	20 setup, 24 curves	20 setup, 24 curves
Autocalibration	yes	yes	yes
External Trigger	yes	yes	yes
Help	on screen detailed help	on screen detailed help	on screen detailed help
<b>Interfaces</b>			
USB	USB HOST - 2.0	USB HOST - 2.0	USB HOST - 2.0
RS-232	yes	yes	yes
IEEE-488	option when ordering	option when ordering	option when ordering
<b>GENERAL SPECIFICATION</b>			
Display	TFT LCD coloured 320x234	TFT LCD coloured 320x234	TFT LCD coloured 320x234
Grid	8x10div or 8x12div without menu	8x10div or 8x12div without menu	8x10div or 8x12div without menu
Power supply	100 - 240V / 48-63Hz (65VA max.)	100 - 240V / 48-63Hz (65VA max.)	100 - 240V / 48-63Hz (65VA max.)
Safety	IEC1010, Cat II -300V	IEC1010, Cat II -300V	IEC1010, Cat II -300V
Dimensions, weight	254x142x310mm - 4,3 Kg	254x142x310mm - 4,3 Kg	254x142x310mm - 4,3 Kg

Optional accessories : see page 54, 55, 56, 57.

# DIGITAL OSCILLOSCOPES

## 4 channels DSO, from 60MHz to 200MHz



Sefram 5064DC

60 MHz  
1GS/s  
4 CHANNELS

### Capabilities

- 8 bit vertical resolution
- Sampling rate 1Gs/s and 25Gs/s (ETS mode)
- 25K memory per channel
- 27 automatic measurements and Go-No-Go mode
- Colour TFT LCD
- Detailed on screen help
- USB 2.0 (Host) interface and RS-232
- GPIB interface (factory option)



Sefram 5164DC

100 MHz  
1GS/s  
4 CHANNELS



Sefram 5264DC

200 MHz  
1GS/s  
4 CHANNELS

Technical Specification	5064DC	5164DC	5264DC
Number of channels	4	4	4
<b>Vertical Mode</b>			
Bandwidth (-3dB)	60MHz	100MHz	200MHz
Resolution	8 bit	8 bit	8 bit
Sensitivity	2mV/div to 5V/div	2mV/div to 5V/div	2mV/div to 5V/div
Rise time	<5,8ns	<3,5ns	<1,75ns
Coupling	AC, DC, GND	AC, DC, GND	AC, DC, GND
Input impedance	1M ohms //16pF	1M ohms //16pF	1M ohms //16pF
<b>Horizontal Mode</b>			
Time base	1ns to 10s /div	1ns to 10s /div	1ns to 10s /div
Display	window, roll, XY	window, roll, XY	window, roll, XY
<b>Acquisition</b>			
Sampling rate	1Gs/s	1Gs/s	1Gs/s
Memory (per channel)	25Kwords	25Kwords	25Kwords
ETS sampling rate	25Gs/s	25Gs/s	25Gs/s
Mode	single, peak, average	single, peak, average	single, peak, average
<b>Trigger</b>			
Mode	Auto, normal, single, TV, delayed, event, pulse, edge	Auto, normal, single, TV, delayed, event, pulse, edge	Auto, normal, single, TV, delayed, event, pulse, edge
Coupling	AC, DC, LF, noise rejection	AC, DC, LF, noise rejection	AC, DC, LF, noise rejection
XY	yes	yes	yes
Automatic measurement	27 measurements, with FFT	27 measurements, with FFT	27 measurements, with FFT
Cursors	dV, dT, 1/dT	dV, dT, 1/dT	dV, dT, 1/dT
Counter	6 digit	6 digit	6 digit
Autoset	yes	yes	yes
Memory	20 setup, 24 curves	20 setup, 24 curves	20 setup, 24 curves
Autocalibration	yes	yes	yes
External Trigger	-	-	-
Help	on screen detailed help	on screen detailed help	on screen detailed help
<b>Interfaces</b>			
USB	USB HOST - 2.0	USB HOST - 2.0	USB HOST - 2.0
RS-232	yes	yes	yes
IEEE-488	option when ordering	option when ordering	option when ordering
<b>GENERAL SPECIFICATION</b>			
Display	TFT LCD coloured 320x234	TFT LCD coloured 320x234	TFT LCD coloured 320x234
Grid	8x10div or 8x12div without menu	8x10div or 8x12div without menu	8x10div or 8x12div without menu
Power supply	100 - 240V / 48-63Hz (65VA max.)	100 - 240V / 48-63Hz (65VA max.)	100 - 240V / 48-63Hz (65VA max.)
Safety	IEC1010, Cat II -300V	IEC1010, Cat II -300V	IEC1010, Cat II -300V
Dimensions, weight	254x142x310mm - 4,3 Kg	254x142x310mm - 4,3 Kg	254x142x310mm - 4,3 Kg

Optional accessories : see page 54, 55, 56, 57.  
Interface IEEE p/n 5x60 IEEE

# ANALOG OSCILLOSCOPES

30MHz



BK2120B  
BK 2121  
BK2125A

40MHz



BK1541D

60MHz



BK2160A

100MHz



BK2190B

## Capabilities

- 30MHz bandwidth
- Dual or single trace operation
- 5 mV/div sensitivity
- Delayed sweep (BK2125A)
- Built in component tester (BK2125A)
- Built in Frequency Meter (BK2121)
- Compact low profile design

## Capabilities

- 40MHz bandwidth
- Dual or single trace operation
- Adjustable Hold-off
- X10 magnifier
- Compact low profile design

## Capabilities

- 60MHz bandwidth
- Dual or single trace operation
- Delayed sweep
- Adjustable Hold-off
- Built in Component tester
- Z axis input
- Single sweep
- Adjustable hold off

## Capabilities

- 100MHz bandwidth
- Dual time base oscilloscope (2 channels)
- 5mV/division sensitivity
- X10 magnifier
- Adjustable Hold-off
- 15 kV accelerating voltage
- Channel 2 output
- Z axis input

Technical Specification	BK2120B	BK2121	BK2125A	BK1541D	BK2160A	BK2190B
Number of channels	2	2	2	2	2	2
<b>Vertical mode</b>						
Bandwidth (-3dB)	30MHz	30MHz	30MHz	40MHz	60MHz	100MHz
Sensitivity	5mV to 5V/div	5mV to 5V/div	5mV to 5V/div	5mV to 5V/div	5mV to 1V/div	5mV to 5V/div
Rise time	12ns	12ns	12ns	8,8ns	5,8ns	3,5ns
Input impedance	1M $\Omega$ //25pF	1M $\Omega$ //25pF	1M $\Omega$ //25pF	1M $\Omega$ //25pF	1M $\Omega$ //25pF	1M $\Omega$ //25pF
Display mode :	CH1, CH2, Dual, Chop, ADD	CH1, CH2, Dual, Chop, ADD	CH1, CH2, Dual, Chop, ADD	CH1, CH2, Dual, Chop, ADD	CH1, CH2, Dual, Chop	CH1, CH2, Dual, Chop
<b>Horizontal mode</b>						
Sweep time	0,1 $\mu$ s to 2s/div	0,1 $\mu$ s to 2s/div	0,1 $\mu$ s to 2s/div	0,2 $\mu$ s to 0,2s/div	0,1 $\mu$ s to 2s/div	20ns to 5s/div
Expansion	X10	X10	X10	X10	X10	x10
Delayed time base	-	-	0,1ms to 0,1s/div	-	0,1 $\mu$ s to 2s/div	20ns to 0,5s/div
<b>Trigger</b>						
Source	CH1, CH2, ALT, Ext, Line	CH1, CH2, ALT, Ext, Line	CH1, CH2, ALT, Ext, Line	CH1, CH2, ALT, Ext, Line	CH1, CH2, ALT, Ext, Line	CH1, CH2, ALT, Ext, Line
Mode	Auto, Normal, TV-V, TV-H	Auto, Normal, TV-V, TV-H	Auto, Normal, TV-V, TV-H	Auto, Normal, TV-V, TV-H	Auto, Normal, TV-V, TV-H	Auto, Normal, TV-V, TV-H
Slope	+ or -	+ or -	+ or -	+ or -	+ or -	+ or -
Hold off	-	-	-	adjustable	adjustable	adjustable
XY	yes	yes	yes	yes	yes	yes
Bandwidth	DC to 1MHz	DC to 1MHz	DC to 1MHz	DC to 1MHz	DC to 1MHz	DC to 1MHz
Components tester	-	-	yes	-	yes	yes
Frequencymeter	-	yes, 50MHz	-	-	-	-
Z-axis input	-	-	-	-	yes	-
Dimensions	180 x 370 x 440 mm	180 x 370 x 440 mm	180 x 370 x 440 mm	324 x 398 x 132 mm	324 x 398 x 132 mm	324 x 398 x 132 mm
Weight	7,8 kg	7,8 kg	7,8 kg	7,6 kg	7,6 kg	8,5 kg

Optional accessories : see page 54, 55, 56, 57.