

Digital oscilloscopes Overview

Oscilloscopes has been considered to be one of the most widely used instruments in the Electrical Test and Measurement field. With the rapid advancement of technology, oscilloscope market has been shifting from conventional analog technology toward Digital Storage Oscilloscopes (DSO).

To satisfy various need of waveform observation and analysis, SEFRAM provides an entire series of DSO.

Selection Guide

	Bandwidth	Display	Channels	Sampling RTS	Memory	FFT	Counter	Go-No-Go (mask)	USB Host	USB device	SD interface	IEEE	page	
Economical compact series	5322DC	25MHz	LCD, TFT	2	250Ms/s	4k	yes	6 digit	-	-	yes	yes	-	28
	5342DC	40MHz	LCD, TFT	2	250Ms/s	4k	yes	6 digit	-	-	yes	yes	-	28
	5362DC	60MHz	LCD, TFT	2	250Ms/s	4k	yes	6 digit	-	-	yes	yes	-	29
	5382DC	100MHz	LCD, TFT	2	250Ms/s	4k	yes	6 digit	-	-	yes	yes	-	29
	5442DC	60MHz	LCD, TFT	2	1Gs/s	1M	yes	6 digit	-	-	yes	yes	-	27
	5462DC	100MHz	LCD, TFT	2	1Gs/s	1M	yes	6 digit	-	-	yes	yes	-	27
	5482DC	150MHz	LCD, TFT	2	1Gs/s	1M	yes	6 digit	-	-	yes	yes	-	27
Bench economical series	BK2530	25MHz	LCD, B&W	2	250Ms/s	4k	yes	6 digit	yes	-	yes	-	-	32
	BK2534	60MHz	LCD, TFT	2	400Ms/s	4k	yes	5 digit	yes	yes	yes	-	-	33
Bench, Hi-performance 2 channels	5062DC	60MHz	LCD, TFT	2	1Gs/s	25k	yes	6 digit	yes	yes	yes	-	option	30
	BK2540	60MHz	LCD, TFT	2	1Gs/s	4k	yes	5 digit	yes	yes	yes	-	-	33
	BK2542	100MHz	LCD, TFT	2	1Gs/s	4k	yes	5 digit	yes	yes	yes	-	-	33
	5160DC	100MHz	LCD, TFT	2	1Gs/s	25k	yes	6 digit	yes	yes	yes	-	option	30
	5260DC	200MHz	LCD, TFT	2	1Gs/s	25k	yes	6 digit	yes	yes	yes	-	option	30
Bench, Hi-performance 4 channels	5064DC	60MHz	LCD, TFT	4	1Gs/s	25k	yes	6 digit	yes	yes	yes	-	option	31
	5164DC	100MHz	LCD, TFT	4	1Gs/s	25k	yes	6 digit	yes	yes	yes	-	option	31
	5264DC	200MHz	LCD, TFT	4	1Gs/s	25k	yes	6 digit	yes	yes	yes	-	option	31



Digital Oscilloscopes

NEW
2010

2 channels compact hi-performance DSO, from 60MHz to 150MHz



Sefram 5482DC

Capabilities

- 2 channels, full bandwidth from 60MHz to 150MHz
- Vertical resolution: 8 bit
- Sampling: 1Gs/s and 25Gs/s in ETS
- Memory: 2Mpoints
- 27 automatic measurements, including arithmetic, FFT and FFT RMS
- 6 digits real time frequency counter
- Coloured TFT LCD
- SD-CARD interface
- USB1.1 & 2.0 interface
- Freewave PC software

Technical Specification	5442DC	5462DC	5482DC
Number of channels	2	2	2
Vertical Mode			
Bandwidth (-3dB)	60MHz	100MHz	150MHz
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	<2.3ns
Coupling	AC, DC, GND	AC, DC, GND	AC, DC, GND
Input impedance	1M ohms //15pF	1M ohms //15pF	1M ohms //15pF
Horizontal Mode			
Time base	1ns to 50s /div	1ns to 50s /div	1ns to 50s /div
Display	window, zoom, roll, XY	window, zoom, roll, XY	window, zoom, roll, XY
Acquisition			
Sampling rate	1Gs/s	1Gs/s	1Gs/s
Memory (total)	2Mpoints	2Mpoints	2Mpoints
ETS sampling rate	25Gs/s	25Gs/s	25Gs/s
Mode	single, peak, average	single, peak, average	single, peak, average
Averaging	2, 4, 8, 16, 32, 64, 128, 256	2, 4, 8, 16, 32, 64, 128, 256	2, 4, 8, 16, 32, 64, 128, 256
Trigger			
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 reject	AC, DC, LF, HF, noise reject	AC, DC, LF, HF, noise reject
External Trigger	yes	yes	yes
Functions & measurements			
XY	yes	yes	yes
Automatic measurement	27 measurements, including FFT, FFT RMS, +, -, x	27 measurements, including FFT, FFT RMS, +, -, x	27 measurements, including FFT, FFT RMS, +, -, x
Cursors	dV, dT, 1/dT	dV, dT, 1/dT	dV, dT, 1/dT
Counter	6 digit	6 digit	6 digit
Autoset	yes, selectable	yes, selectable	yes, selectable
Memory	up to 15 setup or curves	up to 15 setup or curves	up to 15 setup or curves
Autocalibration	yes	yes	yes
Interfaces			
USB	yes, USB1.1 & 2.0 (device)	yes, USB1.1 & 2.0 (device)	yes, USB1.1 & 2.0 (device)
SD card (front panel)	yes, for display, setup and files	yes, for display, setup and files	yes, for display, setup and files
General Specification			
Display	LCD, TFT coloured 320x234 dots	LCD, TFT coloured 320x234 dots	LCD, TFT coloured 320x234 dots
Menu	per function, with multilanguage	per function, with multilanguage	per function, with multilanguage
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

Supplied with: power cord, user's manual, 1 set of 1/1:10 probes, Freewave software for PC (CD-ROM)

Optional accessories : see page 44,45

Digital Oscilloscopes

Digital Oscilloscopes

2 channels compact DSO, from 25MHz to 100MHz

28



Sefram 5342DC

40 MHz
250 MS/s
2 CHANNELS

Capabilities

- 2 channels, full bandwidth from 25MHz to 100MHz
- Vertical resolution: 8 bit
- Sampling: 250Mech/s and 25Gech/s in ETS
- Memory: 4K per channel
- 19 automatic measurements, including arithmetic and FFT
- 6 digits real time frequency counter
- Coloured TFT LCD
- SD-CARD interface
- USB1.1 & 2.0 interface
- Freewave PC software

Technical Specification	5322DC	5342DC
Number of channels	2	2
Vertical Mode		
Bandwidth (-3dB)	25MHz	40MHz
Resolution	8 bit	8 bit
Sensitivity	2mV/div to 5V/div	2mV/div to 5V/div
Rise time	<14ns	<8,75ns
Coupling	AC, DC, GND	AC, DC, GND
Input impedance	1M ohms //16pF	1M ohms //16pF
Horizontal Mode		
Time base	1ns to 10s /div	1ns to 10s /div
Display	window, roll, XY	window, roll, XY
Acquisition		
Sampling rate	250Ms/s	250Ms/s
Memory (per channel)	4 kwords	4 kwords
ETS sampling rate	25Gs/s	25Gs/s
Mode	single, peak, average	single, peak, average
Averaging	2, 4, 8, 16, 32, 64, 128, 256	2, 4, 8, 16, 32, 64, 128, 256
Trigger		
Mode	Auto, normal, single, TV, pulse, edge	Auto, normal, single, TV, pulse, edge
Coupling	AC, DC, LF, HF, noise reject	AC, DC, LF, HF, noise reject
External Trigger	yes	yes
Functions & measurements		
XY	yes	yes
Automatic measurement	19 measurements, including FFT	19 measurements, including FFT
Cursors	dV, dT, 1/dT	dV, dT, 1/dT
Counter	6 digit	6 digit
Autoset	yes, selectable	yes, selectable
Memory	up to 15 setup or curves	up to 15 setup or curves
Autocalibration	yes	yes
Interfaces		
USB	yes, USB1.1 & 2.0 (device)	yes, USB1.1 & 2.0 (device)
SD card (front panel)	yes, for display, setup and files	yes, for display, setup and files
General Specification		
Display	LCD, TFT coloured 320x234 dots	LCD, TFT coloured 320x234 dots
Menu	per function	per function
Grid	8x10div	8x10div
Power supply	100 - 240V / 48-63Hz (25VA max.)	100 - 240V / 48-63Hz (25VA max.)
Safety	IEC1010, Cat II -300V	IEC1010, Cat II -300V
Dimensions, weight	140x142x310mm - 2,5 Kg	140x142x310mm - 2,5 Kg

Supplied with: power cord, user's manual, 1 set of 1/1:10 probes, Freewave software for PC (CD-ROM)

Optional accessories : see page 44,45

Digital Oscilloscopes

2 channels compact DSO, from 25MHz to 100MHz



60 MHz
250 Ms/s
2 CHANNELS

Sefram 5362DC

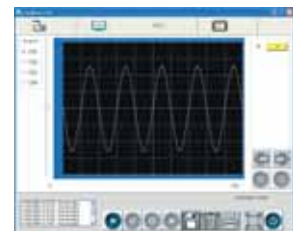
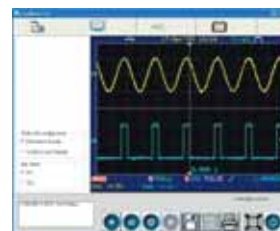
Technical Specification	5362DC	5382DC
Number of channels	2	2
Vertical Mode		
Bandwidth (-3dB)	60MHz	100MHz
Resolution	8 bit	8 bit
Sensitivity	2mV/div to 5V/div	2mV/div to 5V/div
Rise time	<5,8ns	<3,5ns
Coupling	AC, DC, GND	AC, DC, GND
Input impedance	1M ohms //16pF	1M ohms //16pF
Horizontal Mode		
Time base	1ns to 10s /div	1ns to 10s /div
Display	window, roll, XY	window, roll, XY
Acquisition		
Sampling rate	250Ms/s	250Ms/s
Memory (per channel)	4 kwords	4 kwords
ETS sampling rate	25Gs/s	25Gs/s
Mode	single, peak, average	single, peak, average
Averaging	2, 4, 8, 16, 32, 64, 128, 256	2, 4, 8, 16, 32, 64, 128, 256
Trigger		
Mode	Auto, normal, single, TV, pulse, edge	Auto, normal, single, TV, pulse, edge
Coupling	AC, DC, LF, HF, noise reject	AC, DC, LF, HF, noise reject
External Trigger	yes	yes
Functions & measurements		
XY	yes	yes
Automatic measurement	19 measurements, including FFT	19 measurements, including FFT
Cursors	dV, dT, 1/dT	dV, dT, 1/dT
Counter	6 digit	6 digit
Autoset	yes, selectable	yes, selectable
Memory	up to 15 setup or curves	up to 15 setup or curves
Autocalibration	yes	yes
Interfaces		
USB	yes, USB1.1 & 2.0 (device)	yes, USB1.1 & 2.0 (device)
SD card (front panel)	yes, for display, setup and files	yes, for display, setup and files
General Specification		
Display	LCD, TFT coloured 320x234 dots	LCD, TFT coloured 320x234 dots
Menu	per function	per function
Grid	8x10div	8x10div
Power supply	100 - 240V / 48-63Hz (25VA max.)	100 - 240V / 48-63Hz (25VA max.)
Safety	IEC1010, Cat II -300V	IEC1010, Cat II -300V
Dimensions, weight	140x142x310mm - 2,5 Kg	140x142x310mm - 2,5 Kg

Supplied with: power cord, user's manual, 1 set of 1/1:10 probes, freewave software for PC (CD-ROM)

Optional accessories : see page 44,45

Freewave PC software

The PC software (Freewave) is supplied with all 53XX DSO's. This software enables the full screen image transfer from oscilloscope to PC via the USB port in a fast-updating manner, so the user is able to see a nearly real time display on the PC screen. The screen image (.bmp or .jpg) and waveform data (.csv) could be saved into PC for further application. The continuous waveform images (.avi) in a period of time could be recorded for later playback. This video recorder function facilitates the repetitive observation of a saved waveform with continuous variation in a certain period of time.



Digital oscilloscopes

2 channels DSO, from 60MHz to 200MHz

30



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

	Sefram 5062DC	Sefram 5160DC	Sefram 5260DC
Number of channels	2	2	2
Vertical Mode			
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
Horizontal Mode			
Time base	1ns to 10s /div	1ns to 10s /div	1ns to 10s /div
Display	window, roll, XY	window, roll, XY	window, roll, XY
Acquisition			
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
Trigger			
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 setups, 24 curves	20 setups, 24 curves	20 setups, 24 curves
Autocalibration	yes	yes	yes
External Trigger	yes	yes	yes
Help	on screen detailed help	on screen detailed help	on screen detailed help
Interfaces			
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
General Specification			
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

Supplied with: power cord, user manual, Freeware software.

Interface IEEE s/n 5x60 IEEE. Factory option

Optional accessories : see page 44,45

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	Sefram 5064 DC	Sefram 5164 DC	Sefram 5264 DC
Number of channels	4	4	4
Vertical Mode			
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
Horizontal Mode			
Time base	1ns to 10s /div	1ns to 10s /div	1ns to 10s /div
Display	window, roll, XY	window, roll, XY	window, roll, XY
Acquisition			
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
Trigger			
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 setups, 24 curves	20 setups, 24 curves	20 setups, 24 curves
Autocalibration	yes	yes	yes
External Trigger	-	-	-
Help	on screen detailed help	on screen detailed help	on screen detailed help
Interfaces			
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
General Specification			
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

Supplied with: power cord, user manual, firmware software.

Interface IEEE s/n 5x60 IEEE. Factory option

Optional accessories : see page 44,45

Digital Oscilloscopes

Digital oscilloscopes

25MHz Digital Sampling Oscilloscope, 2 channels

32



BK 2530

25MHz
250Ms/s
2 CHANNELS

Capabilities

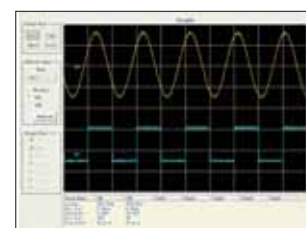
- 25MHz bandwidth, 2 channels
- Vertical resolution: 8 bit
- Sampling rate: 250Ms/s and 50Gs/s in ETS
- Memory: 4K per channel
- 11 automatic measurements
- Autoset
- B&W LCD display
- USB interface
- Automatic calibration

Technical Specification	BK 2530
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
External Trigger	yes, with BNC on front panel
Functions & measurements	
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 curves
Autocalibration	yes
Interfaces	
USB	yes, EasyScope for Windows TM software
General Specification	
Display	LCD, B&W 320x240 dots
Grid	8x10div
Power supply	100 - 240V / 45-440Hz (50VA max.)
Safety	IEC1010, Cat II -300V
Dimensions, weight	290x150x300mm - 4,6 Kg

Supplied with: power cord, user's manual, 1 set of 1/1:10 probes, Easyscope software for PC (CD-ROM)

Optional accessories : see page 44,45

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

60MHz to 100MHz Digital Sampling Oscilloscopes



BK 2542



A compartment for accessories

Capabilities

- Vertical resolution: 8 bit
- Sampling rate: 1Gs/s (BK2540, BK2542) and 50G/s ETS
- Memory: 4k per channel
- Autoset
- 24 automatic measurements
- Direct print on USB memory stick
- Coloured TFT LCD
- 2 USB interfaces
- Automatic closed case calibration

Technical Specification

	BK2534	BK2540	BK2542
Number of channels	2	2	2
Vertical Mode			
Bandwidth (-3dB)	60MHz	60MHz	100MHz
Resolution	8 bits	8 bits	8 bits
Sensitivity	2mV/div to 5V/div	2mV/div to 5V/div	2mV/div to 5V/div
Rise time	<5,8ns	<5,8ns	<3,5ns
Coupling	AC, DC, GND	AC, DC, GND	AC, DC, GND
Input impedance	1M ohms //19pF	1M ohms //19pF	1M ohms //19pF
Bandwidth limit	yes, 20MHz	yes, 20MHz	yes, 20MHz
Horizontal Mode			
Time base	2,5ns to 50s /div	2,5ns to 50s /div	2,5ns to 50s /div
Display	window, roll, XY, zoom	window, roll, XY, zoom	window, roll, XY, zoom
Acquisition			
Sampling rate	400Ms/s	1Gs/s	1Gs/s
Memory (per channel)	4000 samples, 2500 displayed	4000 samples, 2500 displayed	4000 samples, 2500 displayed
ETS sampling rate	40Gs/s	50Gs/s	50Gs/s
Mode	single, peak, average	single, peak, average	single, peak, average
Trigger			
Source	CH1, CH2, Line, Ext, Etx/5	CH1, CH2, Ligne, Ext, Etx/5	CH1, CH2, Ligne, Ext, Etx/5
Mode	Auto, normal, single, TV (with line selection), pulse, edge	Auto, normal, single, TV (with line selection), pulse, edge	Auto, normal, single, TV (with line selection), pulse, edge
Coupling	AC, DC, LF reject, HF reject	AC, DC, LF reject, HF reject	AC, DC, LF reject, HF reject
External Trigger	yes, with BNC on front panel	yes, with BNC on front panel	yes, with BNC on front panel
Functions & measurements			
Automatic measurement	24 measurements with FFT and Go-No-Go mode Vpp, Vmoy, Veff., Vmax, Vmoy et Veff. periode, width, duty cycle, Tm, Td, Freq, période, overshoot, preshoot, delay CH1-CH2, phase	24 measurements with FFT and Go-No-Go mode Vpp, Vmoy, Veff., Vmax, Vmoy et Veff. periode, lwidth, duty cycle, Tm, Td, Freq, période, overshoot, preshoot, delay CH1-CH2, phase	24 measurements with FFT and Go-No-Go mode Vpp, Vmoy, Veff., Vmax, Vmoy et Veff. periode, width, duty cycle, Tm, Td, Freq, période, overshoot, preshoot, delay CH1-CH2, phase
XY	yes	yes	yes
Cursors	dV, dT, 1/dT	dV, dT, 1/dT	dV, dT, 1/dT
Counter	5 digit, DC coupling	5 digit, DC coupling	5 digit, DC coupling
Autoset	yes	yes	yes
Memory	10 setups, 10 curves and 2 reference curves	10 setups, 10 curves and 2 reference curves	10 setups, 10 curves and 2 reference curves
Autocalibration	yes	yes	yes
Interfaces			
USB	USB Host front panel, USB device rear panel	USB Host front panel, USB device rear panel	USB Host front panel, USB device rear panel
Saved file types	BMP, CSV, STP, WFM	BMP, CSV, STP, WFM	BMP, CSV, STP, WFM
Software	Comsoft software for Windows, with front panel emulator	Comsoft software for Windows, with front panel emulator	Comsoft software for Windows, with front panel emulator
General Specification			
Display	LCD, TFT coloured 320x240 dots, VGA 256 colours (145mm diagonal)	LCD, TFT coloured 320x240 dots, VGA 256 colours (145mm diagonal)	LCD, TFT coloured 320x240 dots, VGA 256 colours (145mm diagonal)
Grid	8x10div (ou 8 x 12 without menu)	8x10div (ou 8 x 12 without menu)	8x10div (ou 8 x 12 without menu)
Plastic housing	with compartment for probes and accessories	with compartment for probes and accessories	with compartment for probes and accessories
Power supply	99 - 242V / 47-440Hz (50VA max.)	99 - 242V / 47-440Hz (50VA max.)	99 - 242V / 47-440Hz (50VA max.)
Safety	IEC1010, Cat II -300V	IEC1010, Cat II -300V	IEC1010, Cat II -300V
Dimensions, weight	269x147x310mm - 3,6 Kg	269x147x310mm - 3,6 Kg	269x147x310mm - 3,6 Kg

Supplied with: power cord, user's manual, 1 set of 1/1:10 probes, Comsoft software for PC (CD-ROM)

Optional accessories : see page 44,45