PC Oscilloscopes

M 520 Series

The M520 Oscilloscope Series belongs to the ETC Measuring Lab 3 (EML3) line and offers a wide range of devices. It provides a customer with a possibility to select a device perfectly fitting his or her needs offering the best performance/cost ratio.
Specifically speaking, the M520 Oscilloscope Series comprises of six USB oscilloscopes. They all have identical housing with dimensions of 106 x 163 x 35 mm (excl. connectors and feet); however, each of them has different characteristics and price. All of the M520 Oscilloscope Series devices have two vertical channels with 8-bit resolution and offer deflection factor from 10mV/div to 5V/div in 1-2-5 steps. They are fully compatible with both USB 2.0 and USB 1.1. The devices are extremely portable, because they are powered directly from the USB interface, thus do not need any kind of external power supply.
The vertical deflection system is, of course, equipped with all standard features, such as AC/DC switch, GND switch or probe input ratio selector (1:1, 1:10, 1:100). The measuring channel inputs withstand the voltage of +-200 V with no respect to the selected deflection factor.
Using the random sampling method is the horizontal deflection system capable of reaching the equivalent sampling frequency of up to 20GS/s. It also provides zoom functionality with factors from 10:1 to 1:16. The fastest timebase setting is 200ps/div with zoom factor set to 10:1 or 2ns/div with zoom ratio 1:1.

Dual level triggering system
with digital pulse length filter and event counter on each level. This allows displaying of very complicated events (i.e. displaying of the selected row of a video signal).
Virtual storage
with size of 63000 samples. This feature allows to delay data acquisition from trigger event by maximum of 63000 samples.
Simple and complex triggering modes
Simple triggering mode is very easy to use; while using the complex mode, the customer can utilize the triggering possibilities to the fullest extent.

Technical Parameters	M 521	M 522	M523	M524
Memory Size	4K points per channel			
Vertical Sensitivity	10mV/div to 5V/div in 1-2-5 sequence			
Vertical Accuracy	± 2% of actual value + 1pixel			
Resolution	8 bits (0,39%)			
Frequency Range (-3dB)	DC: 0-60 MHz AC: 1,2 Hz-60 MHz		DC: 0-120 MHz AC: 1,2Hz-120 MHz	
Step Response Rise Time	max. 5,8 ns		max. 2,9 ns	
Channel Isolation	min. -60 dB in full frequency range			
Input Resistance	1 MΩ +5 %, -2 %			
Input Resistance inaccuracy adjustment	Digital for absolute accuracy ± 2% of currentvoltage + 1 pixel			
Input Capacitance	30 pF ± 2pF			
Zero Setting Accuracy	± 2% of range			
Real Time Sample Rate	1 kHz to 50 MHz		1 kHz to 100 MHz	
Maximum Input Voltage	± 200V at 100 kHz or less			

	Part No.	Ord.No.
o	M 521	53802
s	M 522	50916
o	M 523	53803
s	M 524	50917

Technical Parameters	M 525	M 526	M 526/ RM	M 526/ RM/PRO
Memory Size per Channel	4K	8K	8K	8K
Vertical Sensitivity	10mV/div to 5V/div in 1-2-5 sequence			
Vertical Accuracy	± 2% of actual value + 1 pixel			
Resolution	8 bits (0,39%)			
Frequency Range (-3dB)	DC: 0-150 MHz AC: 1,2Hz-150 MHz			
Step Response Rise Time	max. 2,4 ns			
Channel Isolation	min. -60 dB in full frequency range			
Input Resistance	1 MΩ +5 %, -2 %			
Input Resistance Inaccuracy Adjustment	Digital for absolute accuracy ± 2% of currentvoltage + 1 pixel			
Input Capacitance	30 pF ± 2pF			
Zero Setting Accuracy	± 2% of range			
Real Time Sample Rate	1 kHz to 200 MHz			
Maximum Input Voltage	± 200V at 100 kHz or less			

	Part No.	Ord.No.
o	M 525	69293
o	M 526	66276
o	M 526/RM	54992
o	M 526/RM/PRO	59724

M 574 Series

Technical Parameters	M 574
Memory Size per Channel	8K
Vertical Sensitivity	10mV/div to 5V/div in 1-2-5 sequence
Vertical Accuracy	± 2% of actual value + 1 pixel
Resolution	8 bits (0,39%)
Frequency Range (-3dB)	DC: 0-150 MHz AC: 1,2Hz-150 MHz
Step Response Rise Time	max. 2,4 ns
Channel Isolation	min. -60 dB in full frequency range
Input Resistance	1 MΩ +5 %, -2 %
Input Resistance Inaccuracy Adjustment	Digital for absolute accuracy ± 2% of currentvoltage + 1 pixel
Input Capacitance	30 pF ± 2pF
Zero Setting Accuracy	± 2% of range
Real Time Sample Rate	1 kHz to 200 MHz
Maximum Input Voltage	± 200V at 100 kHz or less

	Part No.	Ord.No.
s	M 574	66280