



HS502 / HS512 Oscilloscopes

	 HS 502 (First edition)	 HS 512 (Matt Edition)
Indicated for	Low level signals (standard vehicles, sensors, mV measures)	Higher input range (heavy duty vehicles)
No Input Channels	2	
Min Input Range	± 500mV	±1V
Max Input Range	±16V	±32V
Max Supported Voltage (protection limit)	50Vp	100Vp
Input Ranges	5 steps	
Input Coupling	AC / DC	
Input Impedance	1 Mohm (1.010 kOhm)	
ADC bits	8 - 12 (depending on rate) 300KSa/s - 4.8MSa/s (12 bit) 7 - 13MSa/s (8 bit)	
Sampling Rate	1kSa/s - 13MSa/s	
Real-time Rates	1KSa – 300KSa (2 channels) 1KSa – 600KSa (1 channel)	
BW	1.6 MHz (tested with 2Vpp signal)	
Memory Buffer	32k samples (half when enable both channels)	
Input noise (±16V input range)	0.1% @ 4.8MSa/s 0.07% @ 1.2MSa/s 0.04% @ 150kSa/s (real-time)	
Cross-channel noise	0.25%	
Minimum noise	1mV @ 75KSa/s ±500mV input range	
Trigger	Hardware, real-time, position within first 500 samples	
Power Consumption	120mA @ 5V	
Modules Supported in HScope	– Automotive Module up to: 600 KSa/s single channel, 300KSa/s with 2 channels – Audio Module (it requires additional license) – Digital Module (it requires additional license)	
Min Requirements	Android device with OTG usb port, min OS version: Android 7+	

Comparison with similar products

	DIY HS 402	HS 502	Hantek 1008
No of Channels	2	2	4*
Input Ranges	5	5	2
Max Input Voltage	16	16	20
AC Coupling (1 = YES)	1	1	0
ADC bits	12	12	12
Max Rate	4.2	13	1.2
BW (MHz)	1	1.6	0.3
Mem Buffer (Sa)	64000	64000	1000
Max Real-Time Rate (1CH)	320	600	1
Max Real-Time Rate (2CH)	160	300	1

* Supported in HScope

