



Pocket Multi-Channel Signal Analyzer



The MCSA-16K Pocket Multi-Channel Signal Analyzer is a unique test and measurement instrument. It can be useful for applications in electronic, nuclear and optical spectral signal analyzing. The MCSA-16K is specially designed for application of particle pulse height analysis (PHA) and instrument calibration.

MCSA-16K is most recently developed by HAL Technology based on the digital signal processing (DSP) and USB interface technology. It can analyze a variety of analog signal input fast and accurately in both time domain and frequency domain (histogram). The software with the unit will display the distributions of input signal amplitudes on PC through the high speed USB interface. The data can be acquired in real time and easily stored and printed at the user's choice. No additional power supply to the unit is needed.

The MCSA-16K can be used with a variety of sensors or transducers. HAL Technology would welcome the customer's design input to enhance the analyzing capabilities.

Features

- Variable Channels up to 16K
- Fast Response
- USB interface and real time data acquisitions
- Pulse monitoring and measurement in time domain
- No power supply needed
- Free Software and up-gradable

Applications

- Pulse Height Analysis (PHA)
- Signal Analysis of Sensors
- Multi-Channel Spectral Analysis

Specifications

Channels	Software selections: 16K, 8K, 4K, 2K, 1K, 512, 256
Response	Rise time < 300ns ADC conversion time < 400ns
Pulse Detection Mode	<u>Absolute Peak Mode</u> : for pulse height counting and distribution <u>First Peak Mode</u> : for spectrum analysis
Max. Count of Single Channel	4.29×10 ⁹ (4 Bytes)
Input Signal Range	Amplitude: 0 ~ 5 Volts and 0 ~ 2 Volts (Selectable) Impedance: >10 KΩ
Interface	USB 1.1 or later
Software	MCSA 2.0 (Windows 98/2000/ME/NT/XP)
Status Indications	Red LED on: Power on Green LED flash: PMSA data acquisition
Operating /Storage Temp.	0 ~ 70 °C/-40 ~ 85 °C
Weight	< 350 g
Dimension	95 × 84 × 35 mm



Multi-Channel Signal Analyzer Software

The multi-channel signal analyzer software MCSA-2.0 is free with a Pocket Multi-Channel Signal Analyzer purchased. It is compatible with Window operation systems 98/2000/ME/NT/XP. The software has a built-in help and is easy to install, use and upgradeable. The MCSA Version 2.0 is specially designed for analysis of pulse height and distribution (PHA). Other special functionalities needed in software may be added upon request and license agreement.

Both Information Window and Data Window provide all the needed information for users in direct view. Users may use the mouse to get information on selected regions conveniently. Real-time data and the graphs can be easily stored and printed.

HAL Technology would welcome the customer's design input to add special analyzing features in the software.

Software user interface illustration

