

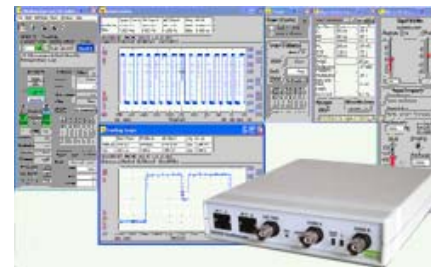
CS328A

Part No:MPCS-DT-CS328A

CS328A is a USB 2.0 mixed signal PC oscilloscope which brings benefits to the user that are unavailable from traditional stand-alone oscilloscopes.

Its innovative approach delivers an unbeatable combination of affordability, ease of use and documentation of test results with the simple "Copy and Paste" facility.

CS328A is a USB connected, PC hosted oscilloscope and spectrum analyser with PC based application software.



Key features include...

- 2 by 10, 12 or 14 bit analog channels - 100 MSa/s simultaneously
- USB 2.0 Interface to the PC
- 8 digital inputs - 100 MSa/s
- Huge 4/8M Samples storage per channel - up to 32Mbytes in total
- Highly flexible mixed signal triggering
- View small ac signals superimposed on large dc or ac offset
- Windows application software XP & Vista, 32 or 64bit
- Simple Copy and Paste into other applications such as Word, Excel
- Oscilloscope and Spectrum analyzer displays
- Self calibration
- Upgradeable firmware
- CE approved
- Includes all probes, cables, power supply, software and manual

CS328A Acquisition Unit

- Two 10, 12 or 14 bit analog channels sampling simultaneously at 100 MSa/sec. AC or DC coupled.
- USB 2.0 Interface to the PC or 10/100Mbit ethernet, depending on option
- Gain automatically set from 20mV full scale to 800V full scale by choosing graph view and probe switch setting.
- Offset automatically set to correspond to the selected amplitude axis view. As an example a graph with amplitude axis of 2.40 to 2.42V automatically chooses a 20mV range offset by +2.40V - good for looking at small signals in single supply op-amp applications.
- Analog triggering of the waveform in view with a resolution of 1% of the display height. The analog trigger may optionally be conditioned with a low pass, high pass or noise filter.
- One external trigger, threshold adjustable from 0 to $\pm 20V$ in 40 mV increments.
- Eight digital inputs sampling at 100 MSa/sec, threshold adjustable from 0 to 8 V in 10 mV increments.
- A hardware trigger system based on a rising or falling edge on any input signal, optionally qualified by a user determined digital input combination and a minimum or maximum trigger duration.
- A rear panel I/O connector with a 100 Mbit/sec bi-directional LVDS/RS422 link, and

three RS422 outputs defaulting to sampling started, trigger received and sampling stopped.

- Each channel (two analog, ext trigger and eight digital) includes 4 or 8M samples of storage, providing up to 40 ms of simultaneous storage for each channel, with 10 ns resolution.
- The sample storage may be allocated as between 2 to 3000 frames varying in size from 4M to 2000 samples. These may be used as a history store for reviewing previously captured signals, or to capture up to 3000 trigger events with a minimal inter-frame delay, while maintaining time relative to the first trigger for all succeeding frames.
- 20 MHz 5th order Anti-alias filter for improved Spectrum Analysis performance.
- Triggered LED and Power LED on the front panel.
- Input power range from 6 ~ 12V, 6W provided by a universal mains adaptor.
- Low jitter (1 ps rms) sampling clock for 70 dB spurious free dynamic range.
- Self calibration to ensure DC performance specifications are met.
- Enclosure size: 153 x 195 x 35 mm.

CS300 Application Software

- Separate, freely moveable and resizable windows to display the signal, a zoomed signal view, and the frequency spectrum of the signal, and control panel.
- The zoomed signal view optionally tracks the signal view cursor.
- Spectrum analysis with a variety of conditioning windows and display in log or linear format.
- Each signal window includes a time/amplitude tracer, and two markers for comparison purposes. Colours are user definable.
- Signal averaging (exponential, block and peak hold) and low pass filtering.
- Signal measurement, including Peak to Peak, RMS, DC, pulse width, period and frequency.
- Copy and Paste graphic or data to other applications.
- Save and Open from disk.
- User defined units, signal names and scaling (offset and gain).
- Text annotation of each graph.

CS328A Equipment List

The following equipment is included with the CS328A:

- 1 x CS328A Oscilloscope Acquisition Unit
- 1 x Power Supply Unit and lead
- 2 x CS1001 1x/10x 150MHz probe kit
- 1 x CS1004/CS1005 8 bit 100MHz digital input pods including probes
- 1 x USB cable
- 1 x CS300 Application Software CD
- 1 x CS328A User Manual