PicoLog®
1000 Series

Multi-channel data acquisition

Up to 16 unipolar analog input channels
Up to 12-bit resolution with 0.5% accuracy
Up to 4 software-configurable digital output lines
Up to 1 MS/s sample rate
USB connected and powered
Complete with ready-to-go data logging software
Includes API and examples for C, Excel (VBA), LabVIEW
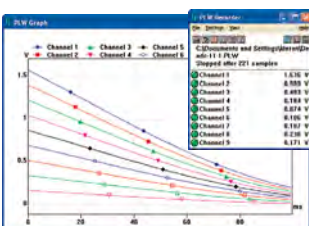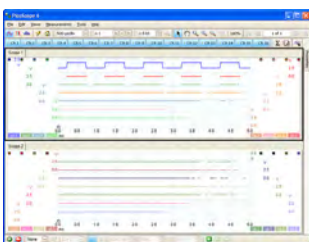
All you need

Designed to meet the needs of a wide range of general-purpose voltage, sensor and transducer logging applications, the PicoLog 1216 and 1012 feature independent software-configurable channels, ranges, scaling and control outputs. Supplied complete with a terminal board that allows easy range extension and ease of terminating wires.

Ready-to-go

The PicoLog 1000 Series multi-channel voltage data loggers include everything needed for immediate use and are complemented by a full suite of software including the PicoLog data logging package, the PicoScope oscilloscope package and a software development kit (SDK) for writing user programs.

Flexible sampling modes

Both loggers feature three sampling modes to meet most data logging needs: streaming, real-time continuous and block mode. Streaming allows channel voltage readings to be logged continuously at 1 kS/s on any number of channels, while real-time continuous provides averaged, time-accurate readings with automatic measurements available in PicoLog. Block mode captures at the full 1 MS/s sample rate of the logger into available memory.

	PicoLog 1216	PicoLog 1012
INPUTS		
Analog inputs	16 channels	12 channels
Resolution (bits)	12 bits	10 bits
Sampling rate, streaming	1 kS/s per channel in PicoLog, 100 kS/s using API	
Sampling rate, block mode	1 MS/s using PicoScope and API	
Sampling rate, real-time continuous	1 kS/s or greater	
Capture size	8128 sample internal buffer shared by all channels 1 million sample limit using SDK (dependent on sampling rate)	
Input type	Single-ended, unipolar	
Voltage range	0 - 2.5 V	
Accuracy	0.5% @ 12 bits	1.0% @ 10 bits
Overload protection	±30 V	
AC/DC coupling	DC coupling	
Input impedance	1MΩ fixed – buffered inputs	
OUTPUTS		
Digital outputs	4 digital outputs	2 digital outputs
Output power for sensors	2.5 V @ 10 mA. Current-limited	
Other outputs	PWM output (PicoScope 6 and API)	None
GENERAL		
PC connectivity	USB 2.0 full speed	
Power requirements	Powered from USB port, < 200 mA operating, < 100 mA on startup	
Input/output connector	25-way D Type, female (pin-compatible with USB ADC-11)	
Dimensions	45 mm x 100 mm x 140 mm (1.77" x 3.94" x 5.51")	
Weight	< 200 g (7.05 oz)	
Temperature range	Operating: 0 °C to 70 °C (20 °C to 50 °C for stated accuracy)	
Humidity range	Operating: 5 % to 85 % RH non-condensing	
Compliance	CE (EMC) Class A emissions & immunity. FCC emissions	
PC requirements	Windows 7, Windows 8 or Windows 10, 32 or 64 bit	
- PicoLog FEATURES		
Multiple views	View data as a graph, spreadsheet or text	
Parameter scaling	Convert raw data into standard engineering units	
Math functions	Use mathematical equations to calculate additional parameters	
Alarm limits	Program an alert if a parameter goes out of a specified range	
- PicoScope 6 FEATURES		
Capture modes	Oscilloscope, spectrum and persistence modes	
Channel maths	Calculate the sum, difference, product, inverse or create your own custom function using standard arithmetic, exponential and trigonometric functions	
Automated measurements	15 scope measurements and 11 spectrum measurements	
DEVELOPMENT KIT		
SDK	Supports all C-compatible languages. Example code provided in C, Visual Basic for Applications (Microsoft Excel) and National Instruments LabVIEW	
Compatibility mode	Drop-in replacement of USB ADC-11	

Ordering information

ORDER CODE	DESCRIPTION	
PP547	PicoLog 1216 with terminal board	
PP546	PicoLog 1012 with terminal board	
PP545	Terminal board only	

* Prices are correct at the time of publication. Sales taxes not included.
Please contact Pico Technology for the latest prices before ordering.