PicoLog®
1000 Series
Multi-channel Voltage Data Loggers

- **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**
- **Includes API and examples for C/C++/C#, VB, LabVIEW VIs**
- **Complete with ready-to-go data logging software**

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. An optional external terminal board allows for 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 an SDK for writing user programs.
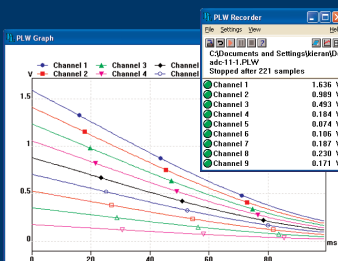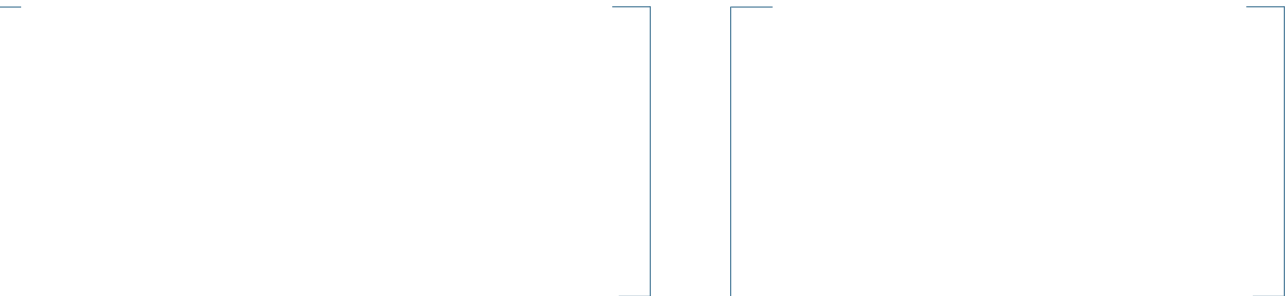
Flexible sampling modes

Both loggers feature 3 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 for the duration of the 8k sample buffer.

	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	
Buffer memory	8k samples shared by all channels	
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
Physical and general		
Power requirements	Powered from USB port, <200 mA operating, <100 mA on startup	
PC connectivity	USB 2.0 full speed	
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)	
Compliance	CE (EMC) Class A emissions & immunity. FCC emissions	
Software		
Compatibility	Windows XP (SP3 or greater), Windows Vista, 7 and 8; 32 and 64 bit	
- PicoLog		
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		
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		
Driver and examples	C/C++/C#, Visual Basic and LabVIEW	
Compatibility mode	Drop-in replacement of USB ADC-11	

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