



# Overview

## DESCRIPTION

The AP034 is a wide-band, active differential probe. The probe features low noise, low input capacitance, high common mode rejection, and Field Effect Transistor (FET) buffered inputs in the probe head. The user-selectable offset gives the probe the flexibility to measure a large range of signal types. Plug-on attenuators and AC coupling accessories further extend the application range. Included interconnect accessories allow connection to surface mount and through-hole components with minimal signal degradation. The input receptacles in the probe head are compatible with standard 0.025 in. (0.635 mm) square pins, which provide a convenient, low-cost method of creating device characterization test fixtures.

The probe is powered directly from a LeCroy oscilloscope through the ProBus interface. The ProBus interface also allows local control of the probe through the oscilloscope user interface and remote control through the interface buses, (GPIB, RS-232). The optional ADPPS power supply allows the AP034 to be used with other instruments such as spectrum analyzers, network analyzers, and oscilloscopes without ProBus interface.

## APPLICATIONS

The AP034 Active Differential Probe is ideal for acquiring high-speed differential signals such as those found in disk drive read channels, differential LAN, video, etc. The probe can be used with spectrum analyzers to acquire signals in some RF systems (for example, balanced IF mixers in hand-held cellular telephones). The high impedance characteristics of both inputs allow you to use the probe as an FET probe to make single-ended measurements in digital systems without introducing a ground loop, as a conventional FET probe would.



### CONVENTIONS USED IN THIS MANUAL

The following conventions may appear in this manual:

#### **Note**

*A Note contains general information relating to the use of the product.*

#### **Caution**

*A Caution contains information that should to be followed to avoid possible damage to the instrument or the device under test.*

#### **WARNING**

*A Warning alerts you to potential injury to yourself. Failing to adhere to the statement in a WARNING message could result in bodily injury.*

The following symbol may appear on the product:



This symbol refers you to additional information contained in this manual. The corresponding information in the manual is denoted with the same symbol.

**CAT I** Overvoltage Installation Category per EN 61010-1

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