cleverscope
plug & play instruments
oscilloscopes

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# Cleverscope CS1030 Differential Probe

## Features

- 3 range attenuator – 20x 50x 200x.
- Battery or external power.
- 1000V input CAT III
- Low Battery indication, with auto power off
- Durable ergonomic design
- Meets CE, IEC 1010, EN 61010, UL 3111.

## Specifications

| Parameter | Value |
|---|---|
| Band width (-3dB, 50Ω load) | DC-25MHz . ( x 20: DC~15MHz) |
| Accuracy | ±2% at 20-30°C, 70% RH after 20 minutes warm up. |
| Attenuation | x 20, x 50, x 200 ( Into 1MΩ scope )<br>x 40, x 100, x 400 (Into 50Ω load) |
| Maximum operating Voltage ( DC + peak AC ) | 140V at x 20 Full scale resolution: 0.14V FSD<br>350V at x 50 Full scale resolution: 0.35V FSD<br>1300V at x 200 Full scale resolution: 1.3V FSD |
| Maximum input Differential Voltage | 1300V ( DC + peak AC ) or 1000V RMS |
| Maximum input Voltage to Ground | 1000V ( DC + peak AC ) or 600V RMS |
| Common Mode Rejection Ratio ( CMRR ): | 50/60Hz: > 10,000 : 1<br>100Hz: > 1,000 : 1<br>1MHz: > 300 : 1 |
| Noise | 2 mV rms ( into 50Ω load ) |
| Input Impedance | 2MΩ 2.3 PF between inputs and ground<br>4MΩ 1.2 PF between inputs. |
| Power | One internal 9V alkaline battery or external 6V-9V DC. |
| Standards | CE, IEC 1010, EN 61010, UL 3111 |
| Size of Differential Converter | 200 x 55 x 30 mm |
| Weight of Differential Converter | 245gm |

## Probe contents

- Differential Converter
- Nylon fabric carry case
- BNC to BNC connection cable
- High Voltage grabber tip probes
- High voltage crocodile clip probes
- High voltage test leads to connect probes
- Instruction Manual

The battery is not included – uses a standard 9V PP3 battery

**WARNINGS**

1. Do not use CS1030 above 1000v ( DC + peak AC ) between ground and the input or 1,300V ( DC + peak AC ) between the input lead.
2. Do not operate CS1030 in wet or damp condition.
3. Do not operate CS1030 in an explosive atmosphere.
4. Do not immerse CS1030 in liquids.
5. Do not operated CS1030 without covers.
6. Please change the battery when the "LOW BATT " LED is lit. If the low battery LED is lit, accuracy is not guaranteed.
7. If the Power LED is not lit, replace the battery.

**FEATURES**

1. The CS1030 FET input differential probe provides a safe means of measuring circuits with floating potentials of up to 1000 V ( DC+ peak AC ) from ground and 1300V ( DC + peak AC ) differential.
2. The CS1030 converts the high voltage differential input signal to a low voltage ground referenced signal for display on your Cleverscope.
3. By using the correct Cleverscope Probe multiplier, voltages will be correctly displayed and measured on the screen.

**INSTRUCTION FOR USE**

1. Connect the CS1030 output BNC to the Cleverscope input BNC with the BNC- BNC cable.
2. Set the CS1030 range selector and Cleverscope probe multiplier
3. Adjust the vertical offset and gain of the Oscilloscope as necessary.
4. Acquire signals and make measurements as desired.

**NOTE:** If the input signal voltage exceeds the probes linear input range, the output voltage will be clipped.

Manufactured for Cleverscope by Pintek Electronic.