Safety Warnings and Cautions

If the probe assembly is used in a manner not specified by the manufacturer, the protection provided by it may be impaired.



The probe inputs are safely rated to a maximum of input voltage as mentioned on page 2 and 3. These maximum ratings apply regardless of the attenuation setting of the probe. Do not apply voltages greater than these ratings between either input and ground.

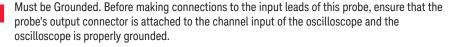


The measurement category of a combination of a PROBE ASSEMBLY and an accessory is the lower of the measurement categories of the PROBE ASSEMBLY and of the accessory.



Be careful when applying high voltage to the inputs of these probes. Follow all pertinent safety rules and guidelines for elevated voltage measurements. Only gualified personnel should perform any testing with voltage levels exceeding 30 Vrms.





Do not attempt internal service or adjustment. Service should be carried out by a Keysight Technologies authorized service personnel.

Periodically inspect the probe wires and cables. Do not operate with visible/suspected damage. Do not use the probe if the wear indicator is visible through the cable jacket. If you suspect a damage, have it inspected by a Keysight authorized service personnel.

Cleaning the Probe

- 1. Disconnect the probe from the oscilloscope and circuit under test.
- 2. Clean the external parts of the probe with a soft dry cloth or if needed, with one slightly dampened with mild soap and water solution. Do not use too much liquid to avoid damaging sensitive electronic components. Do not attempt to clean internally.
- 3. Make sure the probe is completely dry before reconnecting it to the oscilloscope.

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Physical and Environmental Characteristics

Characteristic	Value
Temperature	0 °C to +55 °C (operating)
	-40 °C to +70 °C (non-operating)
Altitude	2,000 m (6,562 ft) (operating)
Humidity	95% RH up to 40 °C, non-condensing (operating)
Pollution Degree	2

Safety Symbols and Markings



This symbol indicates the Environmental Protection Use Period (EPUP) for the product's toxic substances for the China RoHS requirements.



The crossed out wheeled bin symbol indicates that separate collection for waste electric and electronic equipment (WEEE) is required, as obligated by the EU DIRECTIVE and other National legislation.

Refer to keysight.com/go/takeback to understand your Trade in options with Keysight inaddition to product takeback instructions.



The product is marked with this symbol when it is necessary for the user to refer to the instructions in the documentation.



CE CAN ICES/NMB-001(A) ISM GRP 1-A

The CE mark is a registered trademark of the European Community. ISM GRP 1-A denotes the instrument is an Industrial Scientific and Medical Group 1 Class A product. ICES/NMB-001 indicates product compliance ccr.keysight@keysight.com with the Canadian Interference-Causing Equipment Standard.

MAINS ISOLATED

IEC Measurement Category MAINS ISOLATED is for measurements performed on circuits not directly connected to mains.

CAT II

IEC Measurement category II is for measurements performed on circuits directly connected to the low voltage installation. Example: Household appliances portable tools, and similar equipment.

IEC Measurement Category III is for measurements performed on circuits connected to the distribution part of the building's low-voltage mains installation.

CAT III

KC certification mark on DP0030A probes only to demonstrate compliance with the South Korean EMC

South Korean Class A EMC declaration: This equipment is Class A suitable for professional use and is for use in electromagnetic environments outside of the home. 1A21763

Kst-1A21762

KC certification mark on DP0031A / DP0032A / DP0033A probes to demonstrate compliance with the South Korean EMC requirements.

South Korean Class A EMC declaration: This equipment is Class A suitable for professional use and is for use in electromagnetic environments outside of the home.



A registered trademark of the Spectrum Management Agency of Australia. This signifies compliance with the Australia EMC Framework regulations under the terms of the Radio Communication Act of 1992.



This mark indicates that this product has been evaluated against the US and Canadian Safety Standards.



This mark denotes compliance with the essential requirements of the following applicable UK regulations: - Electromagnetic Compatibility Regulations 2016 No. 1091 (as amended)

- Electrical Equipment (Safety) Regulations 2016 No. 1101 (as amended)
- The Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment Regulations 2012 No. 3032 (as amended)

DP0030A/31A/32A/33A High **Voltage Differential Probes**

Probes Documentation

Download the DP0030A/31A/32A/33A probes user's guide from the product's page at http://www.keysight.com/find/DP0031A. Probes related documentation is also available in Keysight's Probe Resource Center (PRC) accessible from https://www.keysight.com/find/PRC.

Probe Connection Sequence



oscilloscope

Attach the accessories to the probe's input leads

(3) Connect to the circuit under test



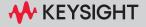
The oscilloscope must have a ground referenced.

Probe Disconnection Sequence

circuit under test

Disconnect from the

Disconnect from the oscilloscope



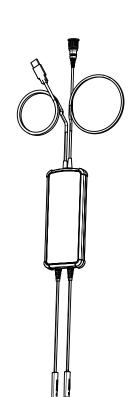
QUICK START GUIDE

6

DP0030A Probe and Supplied Accessories

DP0030A

 $\pm 750 \, V_{\text{peak}} / \pm 75 \, V_{\text{peak}}$ MAINS ISOLATED 600 V_{rms} CAT II, 300 V_{rms} CAT III 100 MHz (in high attenuation)



- ➤ Use the probe's BNC connector to connect to oscilloscope.

 - > Use the probe's USB cord to power the probe. Connect the cord to the oscilloscope's USB port.
 - > Use the probe's Attenuation switch to set attenuation.
 - > Set scaling manually on the oscilloscope.

Refer to the user's guide for the complete set of product specifications and features.



Alligator test clip set, (black and red)

Qty: 1 set 3000 V_{neak} MAINS ISOLATED 1000 V_{rms} CAT III



Hook test clip set (black and red)

Qty: 1 set $1500 \, V_{peak}$ mains isolated 1000 V_{rms} CAT III



Extension lead set, 1 m (black and red)

1000 V_{rms} CAT III

Qty: 1 set 7000 V_{peak} MAINS ISOLATED

Value Accessory Kit for DP0030A Probes

The accessories shown above ship standard with every DP0030A probe. You can also get these as additional/replacement accessories by ordering the DP0041A Value Accessory Kit. This kit is compatible with the DP0030A probes.



The electrical ratings given above are for accessories only. For a combination of a probe and an accessory, the lower of the electrical rating of the probe and of the accessory is

DP0031A/32A/33A Probes and Supplied Accessories

DP0031A \pm 750 V_{peak} / \pm 75 V_{peak} MAINS ISOLATED 600 V CAT II, 300 V CAT III 200 MHz (in high attenuation)

DP0032A $\pm 1500 \, \text{V}_{\text{peak}} / \pm 150 \, \text{V}_{\text{peak}}$ MAINS ISOLATED 600 V___ CAT III

200 MHz (in high attenuation)

DP0033A ± 3000 V_{peak} / ± 300 V_{peak} MAINS ISOLATED ➤ Use probe LEDs to detect: 600 V CAT III 200 MHz (in high attenuation)

- ➤ Use the probe's AutoProbe I interface to:
 - connect to oscilloscope. - power the probe.
 - autoconfigure probe type and offset.
 - autoconfigure probe attenuation.
- - over range of the probe.
 - overload on any of the two probe inputs. - the currently set attenuation.

Refer to the user's guide for the complete set of product specifications and features.



Alligator test clip set, (black and red)

Qty: 1 set $3000 \, V_{\text{peak}} \, \text{MAINS ISOLATED}$ 1000 V_{ma} CAT III (Included with DP0031A/32A/33A probes only)



Jaws test clip set (black and red)

Qty: 1 set 1500 V_{neak} MAINS ISOLATED 1000 V_{rms} CAT III



Hook test clip set

1500 V_{neak} MAINS ISOLATED

(black and red)

 $1000 \, V_{rms} \, CAT \, III$

Qty: 1 set

Accessory Kit for DP003XA Probes

The accessories shown above ship standard with every DP0031A/32A/33A probe. You can also get these as additional/replacement accessories by ordering the DP0040A Accessory Kit. This kit is compatible with the DP0031A/32A/33A probes.

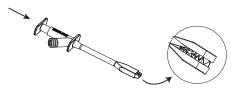
The electrical ratings given above are for accessories only. For a combination of a probe (1) and an accessory, the lower of the electrical rating of the probe and of the accessory is applicable.

Accessories Usage

Push the accessory onto the probe's input lead to connect it. Connect + to the red input lead and - to the black input lead.

Jaws test clip set (black and red)

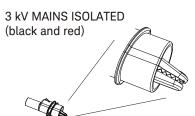
To connect to difficult-to-reach test points



- Push the test clip's plunger to extend its pincers/alligators.
- Extend the pincers around the circuit component to be probed.

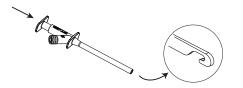
Alligator test clip sets

To clamp onto thicker gauge devices



Hook test clip set (black and red)

To clasp onto smaller components



- Push the test clip's plunger to extend
- Clasp the hook around the circuit component to be probed.

Extension lead set. 1 m (black and red)

To extend the reach of the probe by 1 m, connect the red extension lead to red input lead and the black extension lead to black input lead of the probe.



All supplied accessories provided with these probes are rated for use in non-operating temperature range of -40 °C to 70 °C and operating temperature range of 0 °C to 55 °C. The extension leads are only rated for use in the operating temperature range of 0 °C to

2 3