

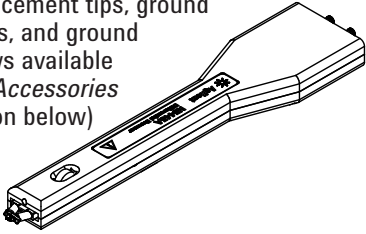


# Recommended Probe Head Configurations

Additional information is on the rear side of this card.

## #1 N5445A Differential Browser

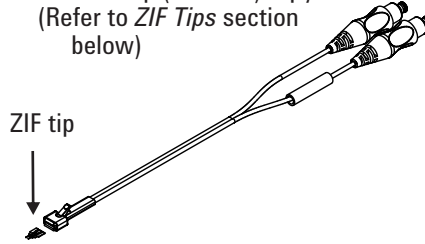
- BW: up to 30 Ghz
- Replacement tips, ground blades, and ground screws available (see *Accessories* section below)



- Best hand held probe for differential and single-ended signals
- Spring-loaded tips and variable spacing (20-125 mil, use thumbwheel to adjust)
- Integrated LED lighting at the tip
  - use button on probe amp to turn on/off
  - hold button down to ramp brightness

## #2 N5439A ZIF Probe Head

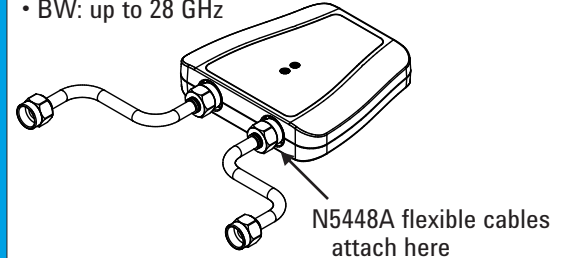
- BW: up to 28 GHz
- 450Ω ZIF tip (N5440A) - qty. 5
- 200Ω ZIF tip (N5447A) - qty. 5 (Refer to *ZIF Tips* section below)



- Economical replaceable tip form factor
- Choice of 450Ω (normal sensitivity) or 200Ω ZIF tips (high sensitivity)
- Variable spacing from 5-80 mil

## #3 N5444A 2.92mm/3.5mm/SMA Head

- BW: up to 28 GHz

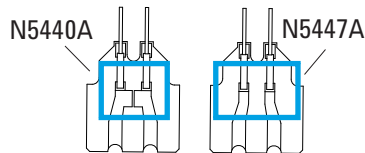


- Connect two 2.92mm/3.5mm/SMA cables to make a differential measurement on a single oscilloscope channel
- Order N5448A 2.92mm flexible cables (25 cm) to extend the cable length

## Accessories

- Strain Relief Putty (N5439-65201)
- Extra wire - for Solder-in probe head only
  - 01169-81301 (7 mil), 01169-21306 (5 mil)
- Replacement browser tips (N5476A) - qty. 4
- Replacement browser ground blades (N5445-68700) - qty. 4
- Replacement browser ground screws (N5445-68701) - qty. 4
- 450Ω ZIF tip (N5440A, normal sensitivity) - qty. 5
- 200Ω ZIF tip (N5447A, high sensitivity) - qty. 5
- 2.92mm Extension Cables (N5448A)
- Performance Verification / Deskw Fixture (N5443A)
- Sampling Oscilloscope Adapter (N5477A)
- N2787A 3D Probe Positioner
  - use to hold the browser or probe amplifier

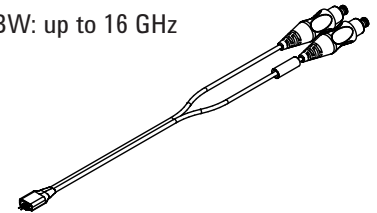
## ZIF Tips



Differentiate the tips by referring to the gold pattern etched on the ZIF tip (see area enclosed by the blue rectangles above)

## #4 N5441A Solder-in Probe Head

- BW: up to 16 GHz



- Economical, semi-permanent connection
- Variable span from 5 - 80 mil



## Additional Information

See other side of card for recommended configurations.  
See the documentation CD or Probe Resource Center for detailed information.

### BW Upgrades

The InfiniiMax III probing system enables you to upgrade the bandwidth of the probe amplifier. Below are the bandwidth upgrade options. You can order more than one upgrade in order to make multiple bandwidth jumps. For example, order the N5446A and N5446B to upgrade from 16 GHz to 25 GHz.

- N5446A: 16 GHz to 20 GHz
- N5446B: 20 GHz to 25 GHz
- N5446C: 25 GHz to 30 GHz

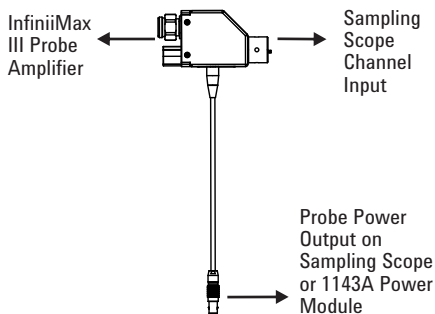
### Probe Resource Center

Visit the Probe Resource Center at <http://www.agilent.com/find/PRC>

The Probe Resource Center is a centralized information system for all of Agilent's oscilloscope probes. It contains probe documentation, data sheets, videos, application notes, SPICE models, and more in one easy to find location on-line.

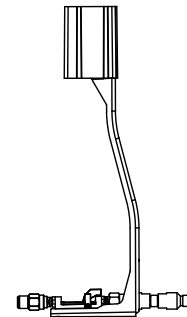
Additionally, the InfiniiMax III amps ship with a documentation CD. This CD not only contains the information that is typically found in a user's guide, but it also has a series of helpful videos on how to use your probe.

### N5477A Sampling Scope Adapter



- Allows you to connect the InfiniiMax III probing system to the Infinium 86100C DCA-J sampling oscilloscope or other RF instruments

### N5443A PV/Deskew Fixture



- Required to calibrate, deskew, and verify the performance of the Infiniimax III probe
- Properly positions the probe for PV testing

### Important Tips

- Each probe amplifier is pre-loaded with its specific measured S-parameters. The scope downloads these parameters and automatically corrects the response of the unique probe system.
- InfiniiMax I and II probe heads are incompatible with InfiniiMax III amplifiers and vice versa.
- Agilent recommends you use the N2787A 3D Probe Positioner with the N5445A Browser probe head. This will help keep the browser tips from breaking and will ensure that the browser maintains a solid contact.

### Warnings

- This probe is a high-performance device that is sensitive to ESD. ESD can quickly and imperceptibly damage or destroy high-performance probes, resulting in costly repairs. Always wear a wrist strap when handling probe components. Agilent also strongly recommends reviewing this product's documentation and videos found on the documentation CD or in the Agilent Probe Resource Center prior to handling these parts.
- Whenever you connect components of your probing system, always start at the probe head and work your way back towards the oscilloscope input. For example, if connecting a probe head, extension cables, and a probe amplifier to an oscilloscope, first connect the probe head to the extension cables. Then connect the extension cables to the probe amplifier and lastly, connect the probe amplifier to the oscilloscope.
- Probes are sensitive devices and should be treated with care. Do not bend/kink the cables, drop heavy objects on them, drop them from large heights, spill liquids on them, etc. Any of these can significantly degrade the performance of the probe.

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