# Keysight N7020A/24A Power Rail Probes

### The Right Tool for Your Power Integrity Measurement and Analysis

The Keysight N7020A/24A power rail probes are for users making power integrity measurements that need mV sensitivity when measuring noise, ripple, and transients on their DC power rails. Many of today's products have tighter tolerances on their DC power rails than the previous generations of these products, and the N7020A/24A power rail probes are designed to help users assure their products meet these tighter measurement tolerances. These probes are designed for measuring periodic and random disturbances (PARD), static and dynamic load response, programmable power rail response, and similar power integrity measurements.



**ONE PAGER** 



### Signal Integrity

- ~1:1 attenuation ratio for great signal-to-noise ratio
- The probe's 50 kΩ DC input impedance will not significantly load DC power rails
- Its high bandwidth makes this probe useful for finding high-speed transients that can have detrimental effects on your design



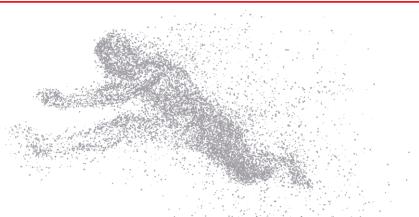
#### Use Probe Offset for Maximum Sensitivity

 A large probe offset range (up to +/-24V) enables you to set your oscilloscope at maximum sensitivity and still have the signal centered on the display

#### Accessories Designed For Power Integrity Probing

Keysight power rail probes come with a variety of probe tip accessories, specifically designed for optimum power rail probing - meeting your tough connectivity challenges

Attribute	N7020A	N7024A	
Probe Bandwidth (-3dB)	2GHz	6GHz	
Attenuation Ratio	1.1:1	1.3:1	
Offset Range	± 24V	±15.25V	
Input Impedance @ DC	50kΩ +/-2%	50kΩ +/-2%	
Probe Noise	0.1 * Scope Noise	0.3 * Scope Noise	
Active Signal Range	± 850mV about offset voltage	± 600mV about offset voltage	
Probe Type	Single-ended	Single-ended	
Included Accessories (orderable separately)	N7021A—Coaxial Pigtail Probe Head (qty 3): 8"		
	N7022A –Main Cable: 48"		
	N7023A—350MHz Browser: 45"		
	Compatible, not included	N7032A 4GHz browser for 0603 and 0805 packages (inch code)	
		N7033A 5GHz browser for 0201 and 0402 packages (inch code)	
		1250-4403 Rotating SMA adapter	
Output Impedance	50Ω	50Ω	
Extended Temperature Range	N7021A Main Cable, N7022A Pigtail Probe Head: -40° to + 85° C		



# **Ordering Information**

- N7020A 2 GHz Power rail probe
  - N7021A Pigtail coax cable (set of 3)
  - N7022A Main cable
  - N7023A Browser (350MHz using the included ground spring)

#### • N7024A 6 GHz Power rail probe

- N7032A Browser (4 GHz w/ N7024A)
- N7033A Browser (5 GHz w/ N7024A)
- N4829A Probe tip kit
- N4836A Dual lead adapter
- N2837A Ground lead
- N4838A Ground springs
- 1250-4169 SMA adapter
- 1250-4403 Rotating adapter
- 1400-3652 SMD micro grabber

## Oscilloscope Compatibility

	N7020A 2 GHz	N7024A 6 GHz
InfiniiVision	3000X, 3000TX, 4000X and 6000X	None
Infiniium	S Series, 9000	S Series, 9000, 90000A, 90000X, V, Z, Q, and UXR Series

For more information, visit www.keysight.com/find/N7020A