

# 4 GHz Active Probe

## P7240 Datasheet



The P7240 4 GHz, 5X active FET probe provides truer signal reproduction and fidelity for high-frequency measurements. The probe has low input capacitance and high input resistance to minimize circuit loading over a wide bandwidth range.

### Key features

- <math>< 120\text{ ps}</math> Rise Time (Guaranteed)
- 4 GHz Bandwidth
- <math>< 1\text{ pF}</math> input capacitance
- Small form factor probe head
- Direct access to SMDs
- Supports MSO/DPO/DSA70000 series oscilloscopes
- TekConnect™ Interface

- Applications:
  - High-speed digital systems design
  - Measures 3.0 V logic, InfiniBand, PCI Express, DDR, Rambus Data Lines, Gigabit Ethernet
  - Component design/characterization
  - Signal integrity, jitter, and timing analysis
  - Mechanical engineering and test
  - Measures 3.0 V logic, InfiniBand, PCI Express, DDR, Rambus Data Lines, Gigabit Ethernet

### Performance you can count on

Selecting the right probe for your application is key to attaining the best signal fidelity in your measurements. Active probes provide truer signal reproduction and fidelity for high-frequency measurements.

The small profile and low-mass head make probing dense circuitry by hand fast an easy.

Depend on Tektronix to provide you with performance you can count on. In addition to industry-leading service and support, this probe comes backed by a one-year warranty.

The accessory tips and adapters included with the P7240 probe enable it to be used on a wide variety of circuits to meet your probing needs.



## **TekConnect™ Interface**

The P7240 with TekConnect interface is a high-performance active probe with high bandwidth and low-capacitive loading to make it the probe of choice for demanding design applications, such as Rambus, DDR DRAM and AGP. This probe is also suited for applications in the communication industry, for measurements on Fibre Channel and Gigabit Ethernet. With the TekConnect interface, you can be assured that maximum signal integrity is maintained to meet present and future bandwidth needs.

## Specifications

All specifications are guaranteed unless noted otherwise. All specifications apply to all models unless noted otherwise.

### Warranted characteristics

Rise time	≤120 ps
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Attenuation	5X
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### Typical characteristics

Bandwidth	4.0 GHz
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DC resistance	20 kΩ
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Input capacitance	<1 pF
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Dynamic range	±2 V
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Offset range	±5 V
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### Physical characteristics

Unit weight (probe only)	223 g (7.52 oz)
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Cable length	1.3 m (50 in)
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### Environmental characteristics

#### Temperature

Operating	0 °C to +40 °C (+32 °F to +104 °F)
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Nonoperating	-55 °C to +75 °C (-67 °F to +167 °F)
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Humidity	0 to 90% RH at +30 °C to +40 °C (+86 °F to +104 °F)
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#### Altitude

Operating	4572 m (15,000 ft)
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Nonoperating	15,240 m (50,000 ft)
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## Ordering information

### Models

P7240	4.0 GHz Active Probe
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## Standard accessories

Part number	Description	Quantity
006-3415-xx	Wrist strap	1
006-7164-xx	Accessory case	1
016-1315-xx	Color coding bands, 2 each of 5 colors	1
016-1772-xx	Pogo pin (set of 10)	1
016-1773-xx	Square pin socket (set of 10)	1
016-1774-xx	Adapter spring (set of 10)	1
016-1952-xx	Probe carrying case	1
071-0759-xx	User manual	1
131-5638-xx	Probe Tip (Set of 10)	1
131-6254-xx	SureToe™ (set of 4)	1
196-3456-xx	Lead set	1
196-3437-xx	3-in Ground lead	3
196-3457-xx	Y-Lead	2
196-3482-xx	Customizable ground lead (set of 5)	1
206-0569-xx	SMT KlipChip™ Adapter	2

## Warranty

One-year warranty covering all parts and labor.

## Recommended accessories

Part number	Description	Quantity
013-0309-xx	SMK4 - IC Grabber (set of 2)	1

## Options

### Service options

Opt. C3	Calibration Service 3 Years
Opt. C5	Calibration Service 5 Years
Opt. D1	Calibration Data Report
Opt. D3	Calibration Data Report 3 Years (with Opt. C3)
Opt. D5	Calibration Data Report 5 Years (with Opt. C5)
Opt. R3	Repair Service 3 Years (including warranty)
Opt. R5	Repair Service 5 Years (including warranty)



P7240 Probe Accessory Reorder List

 <p><b>Tektronix</b> 131-6254-XX SureToe™ SET of 4</p>	 <p><b>Tektronix</b> 131-5638-XX PROBE TIP SET of 10</p>	 <p><b>Tektronix</b> 016-1774-XX SPRING ADAPTER SET of 10</p>
 <p><b>Tektronix</b> 016-1772-XX POGO PIN GND SET of 10</p>	 <p><b>Tektronix</b> 016-1773-XX SOCKET, SQ PIN SET of 10</p>	 <p>016-1315-XX COLOR MARKER BANDS SET SET of 1</p>
 <p>196-3437-XX GROUND LEAD 3.0" 3 EACH</p> <p>196-3456-XX LEAD SET SET of 1</p> <p>196-3457-XX Y LEAD 2 EACH</p>		
 <p>196-3482-XX CUSTOMIZABLE GROUND LEAD SET of 5</p>		
 <p>206-0569-XX SMT KlipChip 2 EACH</p>	 <p>013-0309-XX IC GRABBER 2 SET of 2</p>	

CE Marking Not Applicable.



Tektronix is registered to ISO 9001 and ISO 14001 by SRI Quality System Registrar.

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**For Further Information.** Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology. Please visit [www.tek.com](http://www.tek.com).

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