

# AC Current Probes

## P6021A & P6022



The P6021 and P6022 Current Probes provide versatile AC current measurements. Both probes provide accurate current measurements over a wide range of frequencies. The P6021 and P6022 allow current measurements without breaking the circuit by clipping onto the current carrying conductor. Shielded probe heads are not grounded when the slides are in their open positions, eliminating accidental grounding of the circuit under test.

### Key performance specifications

- P6021A
  - 120 Hz to 60 MHz
  - 10.6 A RMS, 250 A peak, 10 mA sensitivity
- P6022
  - 935 Hz to 120 MHz
  - 4 A RMS, 100 A peak, 1 mA sensitivity

### Key features

- For 1 M $\Omega$  inputs
- Shielded probe head

- AC only
- Split core construction allows easy circuit connection
- 1.5 m (5 ft) cable

### Applications

- Motor drives
- Power inverters/converters
- Power supplies
- Avionics

### P6021A

For general purpose applications, the P6021A provides wide-band performance with excellent low-frequency characteristics. Bandwidth is 120 Hz to 60 MHz. The probe range is switchable between 2 mA/mV and 10 mA/mV.

### P6022

With a head size of 0.47 in. x 0.25 in. (10 mm x 6 mm, about half the size of the P6021A) and a bandwidth of 935 Hz to 120 MHz, the P6022 is ideal for measuring currents in compact, high-performance circuits. Passive termination output is switchable between 1 mA/mV and 10 mA/mV.

# Specifications

All specifications apply to all models unless noted otherwise.

## Physical characteristics

**Cable length** 1.5 m (59 in)

### P6021A probe head

**Length** 20 cm (7.77 in)  
**Width** 16 mm (0.625 in)  
**Height** 32 mm (1.25 in)  
**Maximum conductor diameter** 5 mm (0.197 in)

### P6022 probe head

**Length** 152 mm (6.0 in)  
**Width** 6.4 mm (0.25 in)  
**Height** 12 mm (0.47 in)  
**Maximum conductor diameter** 2.8 mm (0.11 in)

## EMC environment and safety

**Compliance** CAN/CSA-C22.2 No. 61010-1  
CAN/CSA-C22.2 No. 61010-2-032  
UL 61010-1  
UL61010B-2-032  
EN 61010-1  
EN 61010-2-032

## Ordering information

### Models

P6021A	Current Probe
P6022	Current Probe with termination

### Standard accessories

6 in. ground lead	196-3521-00
Instruction manual	071-3004-00 (P6021A), 070-0948-03 (P6022)
Termination	011-0106-00 (P6022 only)

### Recommended accessories

Nylon carrying case	016-1952-xx
Current loop, 1 turn, 50 $\Omega$ with BNC connector, used for Performance Verification	067-2396-xx
Deskew/calibration fixture	067-1686-xx

### Warranty

One year parts and labor.

### 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. R3DW	Repair Service Coverage 3 Years (includes product warranty period). 3-year period starts at time of instrument purchase
Opt. R5	Repair Service 5 Years (including warranty)
Opt. R5DW	Repair Service Coverage 5 Years (includes product warranty period). 5-year period starts at time of instrument purchase



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

**ASEAN / Australasia** (65) 6356 3900  
**Belgium** 00800 2255 4835\*  
**Central East Europe and the Baltics** +41 52 675 3777  
**Finland** +41 52 675 3777  
**Hong Kong** 400 820 5835  
**Japan** 81 (3) 6714 3010  
**Middle East, Asia, and North Africa** +41 52 675 3777  
**People's Republic of China** 400 820 5835  
**Republic of Korea** 001 800 8255 2835  
**Spain** 00800 2255 4835\*  
**Taiwan** 886 (2) 2722 9622

**Austria** 00800 2255 4835\*  
**Brazil** +55 (11) 3759 7627  
**Central Europe & Greece** +41 52 675 3777  
**France** 00800 2255 4835\*  
**India** 000 800 650 1835  
**Luxembourg** +41 52 675 3777  
**The Netherlands** 00800 2255 4835\*  
**Poland** +41 52 675 3777  
**Russia & CIS** +7 (495) 6647564  
**Sweden** 00800 2255 4835\*  
**United Kingdom & Ireland** 00800 2255 4835\*

**Balkans, Israel, South Africa and other ISE Countries** +41 52 675 3777  
**Canada** 1 800 833 9200  
**Denmark** +45 80 88 1401  
**Germany** 00800 2255 4835\*  
**Italy** 00800 2255 4835\*  
**Mexico, Central/South America & Caribbean** 52 (55) 56 04 50 90  
**Norway** 800 16098  
**Portugal** 80 08 12370  
**South Africa** +41 52 675 3777  
**Switzerland** 00800 2255 4835\*  
**USA** 1 800 833 9200

\* European toll-free number. If not accessible, call: +41 52 675 3777

Updated 10 April 2013

**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.tektronix.com](http://www.tektronix.com).

Copyright © Tektronix, Inc. All rights reserved. Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specification and price change privileges reserved. TEKTRONIX and TEK are registered trademarks of Tektronix, Inc. All other trade names referenced are the service marks, trademarks, or registered trademarks of their respective companies.



12 Apr 2013

60W-06647-3

[www.tektronix.com](http://www.tektronix.com)

