

T3CP Current Probes Fact Sheet

DC/AC Current Probes

Debug with Confidence

30 Amps – 500 Amps



Key Characteristics

| | | |
|------------|----------|--------------------------|
| T3CP30-50 | 30 Amps | Bandwidth: DC to 50 MHz |
| T3CP30-100 | 30 Amps | Bandwidth: DC to 100 MHz |
| T3CP50-50 | 50 Amps | Bandwidth: DC to 50 MHz |
| T3CP150-12 | 150 Amps | Bandwidth: DC to 12 MHz |
| T3CP500-5 | 500 Amps | Bandwidth: DC to 5 MHz |

Tools for Improved Debugging

- 5 Models to choose from. ✓ More choice for better application coverage.
- Models with Frequency coverage up to 100 MHz. ✓ Excellent accuracy regardless of the waveform frequency and shape.
- Models with maximum current measurements from 30A to 500A. ✓ Coverage for a wide range of applications.
- 2 different clamp sizes, 5 mm and 20 mm. ✓ Probe cables up to 20 mm diameter.
- Built-in degaussing and automatic zero setting. ✓ Built-in functions to maintain user measurement accuracy.
- Simple connection to any oscilloscope with a BNC 1 MOhm input. ✓ Easy to use with wide oscilloscope support.
- Includes universal wall socket power supply. ✓ No need for batteries, use with the supplied plug in power adaptor.

For more information, please contact:

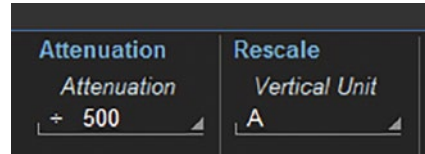


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2 different jaw sizes, 5 mm (T3CP30-50, T3CP30-100, T3CP50-50), and 20 mm (T3CP150-12, T3CP500-5).



The Attenuation Ratio value can be used in your Oscilloscope's channel settings to correctly scale the channel vertical (Y axis) range.

The Teledyne Test Tools T3CP Current Probes come in a protective case and include a universal wall power adaptor.

Power is applied from the universal wall plug adaptor to the control module.

A 1 m BNC cable is supplied with the current probe for connection to the oscilloscope.



The Teledyne Test Tools T3CP Current Probe control module give the user control of degaussing, autozero and setting the range.

The control module has a BNC connector at one end, for connection to the oscilloscope, whilst the current probe measurement head is permanently fixed to the other end.

Electrical Specifications

| Model | Bandwidth | Rise Time | Maximum Continuous Current Rating | Ranges | Minimum Measurable Current |
|------------|---------------|-----------|-----------------------------------|--------------|----------------------------|
| T3CP30-50 | DC to 50 MHz | ≤ 7 ns | 30 A rms | 5 A / 30 A | 1 mA / 10 mA |
| T3CP30-100 | DC to 100 MHz | ≤ 3.5 ns | 30 A rms | 5 A / 30 A | 1 mA / 10 mA |
| T3CP50-50 | DC to 50 MHz | ≤ 7 ns | 50 A rms | 7.5 A / 50 A | 1 mA / 10 mA |
| T3CP150-12 | DC to 12 MHz | ≤ 29 ns | 150 A rms | 30 A / 150 A | 10 mA / 100 mA |
| T3CP500-5 | DC to 5 MHz | ≤ 70 ns | 500 A rms | 75 A / 500 A | 10 mA / 100 mA |

Application Fields

- Component level design and development such as semiconductor switching waveforms in MOSFET or IGBT devices.
- Consumer electronics and household appliances.
- Switching and linear power design.
- DC measurement applications.
- System level development such as motor drives in hybrid and fully electric transportation systems (automotive, rail, sea, etc).
- Power converter design and development for wind farms and other renewable energy.
- Domestic and industrial photo-voltaic (PV) system design.

Excellent Performance

- 5 different probes covering a wide range of applications.
- Maximum current measurement coverage up to 500 Amps.
- Frequency coverage down to DC.
- Power via the supplied universal wall power adaptor.
- Built-in degaussing and auto-zero for improved accuracy.
- Compatible with the majority of Oscilloscopes with a BNC input connector and a 1 MOhm input impedance.
- Each probe has a high and low sensitivity range (dual range probes).
- Over-current warning via a buzzer and LED indicators with a thermal overload safety cutout.