

# T3RC Rogowski Probe Fact Sheet

## Rogowski Current Transducers

## Debug with Confidence 300 Amps – 6000 Amps



### Tools for Improved Debugging

- 5 Models to choose from. ✓ More choice for better application coverage.
- Models with Frequency coverage from <0.1 Hz to 30 MHz. ✓ Excellent accuracy regardless of the waveform frequency and shape.
- Models with maximum current measurements from 300A to 6000A. ✓ Coverage for a wide range of applications.
- 4 different coil sizes. ✓ Probe everything from the leg of a TO220 device to a high power bus bar.
- Near zero insertion impedance. ✓ Minimum effect on the circuit under test.
- Simple to use with flexible probe coils. ✓ Easy to insert into difficult to reach parts of the circuit.
- Use with batteries or plug in power adaptor (supplied). ✓ Use plug in power adaptor when on the bench or batteries when out in the field.

### Key Characteristics

T3RC0300-UM	300 Amps	Bandwidth: <10 Hz to 30 MHz
T3RC0600-HF	600 Amps	Bandwidth : 12 Hz to 30 MHz
T3RC3000-HF	3000 Amps	Bandwidth: 3 Hz to 23 MHz
T3RC3000-LF	3000 Amps	Bandwidth: <0.2 Hz to 6.5 MHz
T3RC6000-LF	6000 Amps	Bandwidth: <0.1 Hz to 6.5 MHz

For more information, please contact:

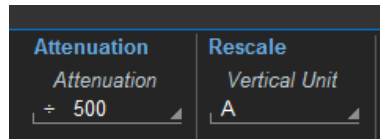


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4 different coil sizes, 80mm, 100mm, 200mm or 300mm coil circumferences. See the Data Sheet for more details.



The Attenuation Ratio value can be used in your Oscilloscope's channel settings to correctly scale the channel vertical (Y axis) range. Some Oscilloscopes allow the vertical (Y axis) units to be changed. This should be set to 'A' to reflect an Amps measurement.

The Teledyne Test Tools Rogowski Current Transducers come in a protective case and include a set of batteries and a wall power adaptor.

The inclusion of both battery power and wall plug operation means that the Teledyne Test Tools Rogowski Current Probes are as happy working out in the field as they are working on the bench.



### Electrical Specifications

Model	Sensitivity	Peak Current	Max Noise	Drop (%)	LF (-3dB) Bandwidth	HF (-3dB) Bandwidth	Peak di/dt	Attenuation Ratio
T3RC0300-UM	20 mV/A	300 A	2.5 mV rms	9	9.2 Hz	30 MHz	20 kA/us	50
T3RC0600-HF	10 mV/A	600 A	1.7 mV rms	11	12 Hz	30 MHz	40 kA/us	100
T3RC3000-HF	2 mV/A	3000 A	1.4 mV rms	2.8	3 Hz	23 MHz	80 kA/us	500
T3RC3000-LF	2 mV/A	3000 A	2.5 mV rms	0.1	0.11 Hz	6.5 MHz	11 kA/us	500
T3RC6000-LF	1 mV/A	6000 A	2.5 mV rms	0.05	0.055 Hz	6.5 MHz	11 kA/us	1000

### Application Fields

- Component level design and development such as semiconductor switching waveforms in MOSFET or IGBT, also capacitor and inductor devices.
- Research and Development.
- 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.
- Long term system monitoring and maintenance.

### Excellent Performance

- 5 different probes covering a wide range of applications.
- Maximum current measurement coverage up to 6000 Amps.
- Peak coil insulation voltage up to 10 kV depending on probe model (See the Data Sheet for more details).
- Power via the supplied wall power adaptor or use with batteries.
- Low loading of the circuit under test.
- Wide coil operating temperature from -40 C to +125 C on UM and HF probes. -20 C to +100 C for LF probes.
- Compatible with the majority of Oscilloscopes with a BNC input connector and a 1 MOhm input impedance.