

---

# КАЛИБРАТОРЫ

## 19301A

---

### ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ

По вопросам продаж и поддержки обращайтесь:

Архангельск (8182)63-90-72	Калининград (4012)72-03-81	Новосибирск (383)227-86-73	Сочи (862)225-72-31
Астана +7(7172)727-132	Калуга (4842)92-23-67	Омск (3812) 21-46-40	Ставрополь (8652)20-65-13
Астрахань (8512) 99-46-04	Кемерово (3842)65-04-62	Орел (4862)44-53-42	Сургут (3462) 77-98-35
Барнаул (3852) 73-04-60	Киров (8332)68-02-04	Оренбург (3532)37-68-04	Тверь (4822)63-31-35
Белгород (4722)40-23-64	Краснодар (861)203-40-90	Пенза (8412)22-31-16	Томск (3822)98-41-53
Брянск (4832)59-03-52	Красноярск (391)204-63-61	Пермь (342)205-81-47	Тула (4872)74-02-29
Владивосток (423)249-28-31	Курск (4712)77-13-04	Ростов-на-Дону (863)308-18-15	Тюмень (3452)66-21-18
Волгоград (844)278-03-48	Липецк (4742)52-20-81	Рязань (4912)46-61-64	Ульяновск (8422)24-23-59
Вологда (8172)26-41-59	Магнитогорск (3519)55-03-13	Самара (846)206-03-16	Уфа (347)229-48-12
Воронеж (473)204-51-73	Москва (495)268-04-70	Санкт-Петербург (812)309-46-40	Хабаровск (4212) 92-98-04
Екатеринбург (343)384-55-89	Мурманск (8152)59-64-93	Саратов (845)249-38-78	Челябинск (351)202-03-61
Иваново (4932)77-34-06	Набережные Челны (8552)20-53-41	Севастополь (8692) 22-31-93	Череповец (8202)49-02-64
Ижевск (3412)26-03-58	Нижний Новгород (831)429-08-12	Симферополь (3652) 67-13-56	Ярославль (4852)69-52-93
Казань (843)206-01-48	Новокузнецк (3843)20-46-81	Смоленск (4812)29-41-54	

сайт: [chrn.nt-rt.ru](http://chrn.nt-rt.ru) || эл. почта: [cmr@nt-rt.ru](mailto:cmr@nt-rt.ru)

# IMPULSE WINDING TESTER

## MODEL 19301A

The 19301A impulse Winding Tester combines high & low inductance test technologies, has a maximum impulse voltage of 1000V, and a high speed sampling rate of 200MHz which satisfies most of the test requirements for power inductor products with a wide inductance range from 0.1uH to 100uH. The built-in functions of Area Size Comparison, Differential Area Comparison, FLUTTER Value, LAPLACIAN Value,  $\Delta$ PEAK or  $\Delta$  PEAK RATIO, PEAK RATIO and  $\Delta$  RESONANT AREA functions are able to inspect coils for poor insulation effectively.

The inspection of wound components for production includes the electrical characteristics test and the withstand voltage test of the electrical safety standard. Poor insulation of a coil, which is a common issue that causes layer short and/or short circuit with the output pin during use, can be caused by bad design, bad molding process, or deterioration of the insulation material. Therefore, it is necessary to perform the layer short test on any winding component or coil.

The 19301A, which is specifically designed for wound component tests, utilizes a high voltage & low capacitance capacitor (low test energy) in parallel with a coil to form an RLC resonant, which is called damping. Analyzing the decay of the waveform via an analysis technology with high speed, precise, and accurate sampling can successfully detect poor insulation within a coil. It provides the winding quality test and the withstand voltage

test on the cores for power inductors, and also makes the manufacturer and user checks of the quality of winding component products more efficient.

The 19301A can be used to test low inductance winding components with a minimum inductance down to 0.1uH. It provides 4-terminal (4-wire) measurement, contact checks, inductance check and voltage compensation for testing low inductance winding components in order to avoid gross inaccuracies in test voltage caused by the inductance variation of the DUT or the equivalent inductance of wires, which makes it the best impulse winding test instrument for low inductance winding components.

The 19301A has an extremely high test speed that can reduce testing times and increase productivity in automated production. In addition, the voltage compensation function reduces the impact of the equivalent inductance of the wiring in automated machines.

The brand new Human Machine Interface has a colorful display and screen capture function. The screenshot of the waveform, which is not only suitable for the on-site production but also applicable for R&D and Quality Assurance to analyze and compare, can be saved through the USB port on the front side of the instrument. This improves the convenience of operation.

## MODEL 19301A

### KEY FEATURES

- Apply high/low inductance test (0.1uH~100uH)
- 10V~1000V impulse voltage test, with 0.06V test resolution
- 18mS high speed test (P1.0 for ACQ)
- Inductance contact check function
- Inductance differential voltage compensation function
- High impulse test sampling rate (200MHz),10bits
- Breakdown Voltage Analysis (BDV)
- Low voltage range to increase the sensibility of waveform analysis (25V/50V/100V/200V/400V/800V/1000V)
- Traditional Chinese/Simplified Chinese/English user interface
- USB port for storing waveform & screen capture
- Graphical color display
- Standard LAN, USB and RS232 interface



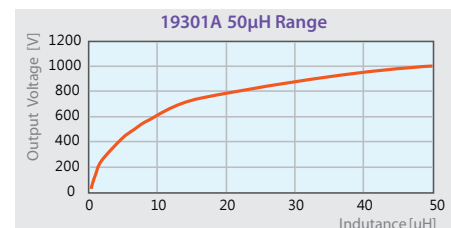
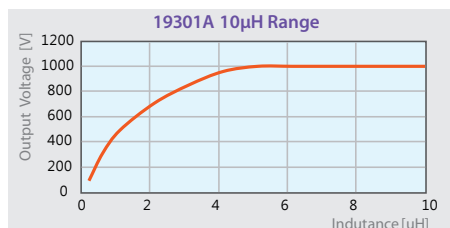
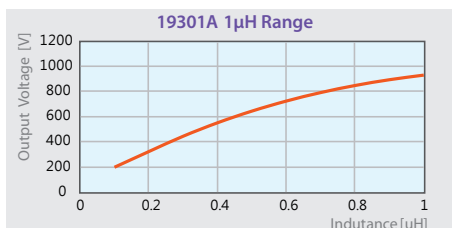
## SPECIFICATIONS

Model	19301A
Applied Voltage (Vpeak), Step	10V~1000V, 1V *1, *2
Test Inductance Range	0.1μH ~ 100μH
Voltage Accuracy	± [1% of setting x (1+0.5μH / Lx) + 2% of Range]
Sampling Rate	10bit / 5ns (200MHz)
Sampling Range	8 Ranges : 0, 1, 2, 3, 4, 5, 6, 7
Pulse Number	Pulse Number : 1~32 ; Excitation Pulse Number : 0~9
Screen Display Resolution	640 x 480 dots (VGA)
Waveform Display Range	colors display 512 x 256 dots
Detection Mode	Area / Differential Area / Flutter Value / Laplacian Value / Δ Peak Ratio / Δ Resonant Area
Test Time	Pulse1.0 : 18ms (ACQ)
<b>Electrical Hazard Protection Function</b>	
Key Lock	Yes (password control)
Interlock	Yes
Indication, Alarm	GO : Short sound, Green LED ; NG : Long sound, Red LED
Interface	RS232, Handler, USB, LAN interface
<b>General</b>	
Operation Environment	Temperature : 0°C ~ 45°C, Humidity : 15% to 95% R.H @ ≤ 40°C
Power Consumption	No Load : <150VA ; Rated Load : <1000VA
Power Requirements	100~240Vac, 50 / 60Hz
Dimension (W x H x D)	177 x 428 x 500 mm / 16.85 x 6.97 x 19.69 inch
Weight	26 kg / 57.32 lbs

\* All specifications are subject to change without notice.

Note \*1 : Using standard test cable shipped along with Chroma's Tester is suggested as long test cable will affect the maximum voltage output.

Note \*2 : Use a standard 1 meter test cable to test the maximum voltage spec. as the table shown below.



---

## По вопросам продаж и поддержки обращайтесь:

Архангельск (8182)63-90-72	Калининград (4012)72-03-81	Новосибирск (383)227-86-73	Сочи (862)225-72-31
Астана +7(7172)727-132	Калуга (4842)92-23-67	Омск (3812) 21-46-40	Ставрополь (8652)20-65-13
Астрахань (8512) 99-46-04	Кемерово (3842)65-04-62	Орел (4862)44-53-42	Сургут (3462) 77-98-35
Барнаул (3852) 73-04-60	Киров (8332)68-02-04	Оренбург (3532)37-68-04	Тверь (4822)63-31-35
Белгород (4722)40-23-64	Краснодар (861)203-40-90	Пенза (8412)22-31-16	Томск (3822)98-41-53
Брянск (4832)59-03-52	Красноярск (391)204-63-61	Пермь (342)205-81-47	Тула (4872)74-02-29
Владивосток (423)249-28-31	Курск (4712)77-13-04	Ростов-на-Дону (863)308-18-15	Тюмень (3452)66-21-18
Волгоград (844)278-03-48	Липецк (4742)52-20-81	Рязань (4912)46-61-64	Ульяновск (8422)24-23-59
Вологда (8172)26-41-59	Магнитогорск (3519)55-03-13	Самара (846)206-03-16	Уфа (347)229-48-12
Воронеж (473)204-51-73	Москва (495)268-04-70	Санкт-Петербург (812)309-46-40	Хабаровск (4212) 92-98-04
Екатеринбург (343)384-55-89	Мурманск (8152)59-64-93	Саратов (845)249-38-78	Челябинск (351)202-03-61
Иваново (4932)77-34-06	Набережные Челны (8552)20-53-41	Севастополь (8692) 22-31-93	Череповец (8202)49-02-64
Ижевск (3412)26-03-58	Нижний Новгород (831)429-08-12	Симферополь (3652) 67-13-56	Ярославль (4852)69-52-93
Казань (843)206-01-48	Новокузнецк (3843)20-46-81	Смоленск (4812)29-41-54	

сайт: [chrn.nt-rt.ru](http://chrn.nt-rt.ru) || эл. почта: [cmr@nt-rt.ru](mailto:cmr@nt-rt.ru)