# **Inductance Pulse Tester**

## **IPT1000**



#### 🔶 Summary

As the Large Power Electronics and New Energy products prosper of high speed, the current rating for the power inductance increase day by day, and the requirement had passed 1000A for power inductance. The traditional measurement method for these circumstances is based on the LCR meter +DC BIAS Unit measuring system. It is not only expensive, large in scale, complex to operate, and the maximum current under test is usually only 200A, far from fulfilling the requirement of new product.

For this CYBERTEK introduced our smaller and lighter IPT1000 type Inductance Impulse Tester with better performance and lower cost, operating smoothly for large power inductance. Our IPT1000 can solve the following problems engineers most worry about: 1. Whether the inductance attenuation of the power inductance under large current can fulfill the design requirement;2. Whether the power inductance will saturate and how much is the saturation.

The traditional LCR meter +DC BIAS Unit method is essentially measuring through accumulating high frequency small signal on a constant DC current. However, this is not the same case with the actual power electronics' switched operation stances. The theory of IPT1000 is applying impulse voltage to the inductance component. By measuring the di/dt change of the part, IPT1000 can calculate the corresponding inductance and other parameters. The result of IPT1000 will be much closer to the actual case.

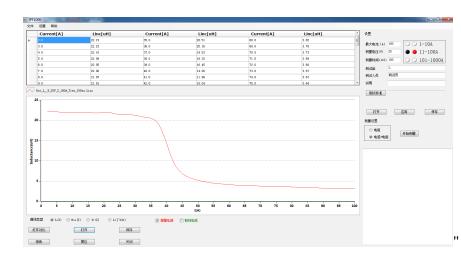
#### Technical parameter of IPT1000

Maximum Measurable Energy	Maximum Impulse Voltage	Maximum Impulse Current	Range 1	Range 2	Range 3
1100Ј	400V	1000A	1-9A	10-99A	100- 1000A

## **Introduction for Inductance Pulse Tester**

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**AInductance measurement result curve as shown below** 

A IPT1000 "ecp" o gcuwtg" qp"cmimlpfu" qhillpf wevcpeg" o ci pgyle "eqtg" cpf "j gn lpi "f gxleg" f gxgnqr o gpy" cpf "r tqf wev" ygurkpi . "lp" ceeqtf cpeg" y kj "lpygtpcylqpcn" KE '8426615 "uvcpf ctf 0"

### A Types of Product under test

RHE 'r qy gt 'l pf wevcpeg. 'r qy gt 'l y kej . 'l pxgt vgt. 'l kngt 'l pf wevcpeg''cpf 't cpulqto gt 'l p'FE ICE ''c ngt pc v pi ''f gx kegu='' C nq ''cr r necdng 'hqt 'hcti g'uecng'r qy gt 'l pf wevcpeg0''

### A Measurable magnetic material"

Kap"eqtg."cmq{"o ci pgvke"eqtg."hgttkg."co qtr j qwu"pcpqet{uvcmkpg"cmq{."ukrkeqp"uvggrluj ggv."gve0"

#### Á Measurable shapes of magnetic core "

Kof wevcpeguø'o ci pgvke "eqtg" qh'tkpi "uj cr g. "tgevcpi ng"uj cr g"cpf "ku" kpekukqp. "G"uj cr g. "uvkeniluj cr g. "ecp"uj cr g0"

## UTEST ShenZhen UTEST Science Technology CO.LTD

Addr:Room 301, 3rd floor, 177 Pioneer Garden, Minzhi Street, Longhua District, Shenzhen Tel: (0086 755)21018117 Email: utestek@utestek.com