



校准证书

CALIBRATION CERTIFICATE



证书编号:
Certificate No. S525061775

第 1 页 共 6 页
Page of

客户信息

Customer Information

客户名称:
Name 通标标准技术服务(上海)有限公司

客户地址:
Address 上海市徐汇区宜山路900号

被校测量 器具信息

Information of
Instrument under
Calibration

仪器名称:
Description 除颤试验脉冲发生器

型号规格:
Model/Type KP-1050S

制造厂商:
Manufacturer 东莞市精邦机械科技有限公司

出厂编号:
Serial No. 20251023001

管理编号:
Asset No. /

接收日期:
Received Date 2025 / 10 / 23

接收状态:
As Received 正常/Normal

结论:
Conclusion 检测/校准结果符合仪器技术指标要求。
The test or calibration results are within the accuracy specifications of instrument.



扫一扫查真伪

证书有效性声明:

- 1、证书首页盖有证书章
- 2、证书须有唯一防伪码
- 3、扫描信息与证书一致

校准日期: 2025 / 10 / 23
Cal. Date

签发日期: 2025 / 10 / 24
Issue Date

建议复校日期: 2026 / 10 / 22
Next Cal. Date

校准: 邓宇东
Calibrated by

核验: 周科
Inspected by

签发: 杨帆
Approved by (技术中心主任)



校准说明

CALIBRATION DIRECTIONS

证书编号：S525061775
Certificate No.

第 2 页 共 6 页
Page of

- 本公司实验室经中国合格评定国家认可委员会审核，符合ISO/IEC17025《检测和校准实验室能力的通用要求》的要求，认可证书号：No.L3103。
This laboratory is accredited to ISO/IEC 17025《Requirements for the competence of Testing and Calibration Laboratories》,CNAS Accreditation Certificate No.L3103.
- 本证书中的校准结果均可溯源至国际单位制（SI）单位。
The calibration results in this certificate are traceable to International System of Units(SI)
- 对本次校准若有异议，委托方应于收到被校件之日起十五日内向本公司提出。
If there is any objection concerning the calibration, the Client should inform the issuing company within 15 days from the date of the device under test return to the client.
- 未经本公司许可，不得部分复印、摘用或篡改本证书的内容。
This report may not be reproduced, except in full, without the written approval of CCIC (ShenZhen) Metrology & Testing Service Co.,Ltd.
- 本证书校准结果只与被校准仪器有关，带'*'号的校准项目或参数不在本公司实验室认可范围内。
The results reported here in apply only to the calibrated equipment, Calibration items or parameter with '*' is beyond the scope of our laboratory accreditation.
- 本次校准的技术依据：
Procedures for the Calibration:

参照JJF 1741-2019《浪涌(冲击)模拟器校准规范》 C.S. for Surge Simulators

参照JJF 1902-2021《时间间隔发生器校准规范》 Calibration Specification for Time Interval Generators

7. 本次校准所使用的主要标准器具：
Standards Used in the Calibration:

器具名称/型号规格 Instrument Description/Model	编号 Asset No.	证书编号 Certificate No.	有效期 Due Date	计量特性/测量范围 Metrological Characteristic /Measuring Range	溯源机构 Traceability institutions
数字示波器/Digital Oscilloscope DSO7104B	CCIC-WX-1004	S525003325	2026/01/23	$U: \pm 1\%$; $T: \pm 0.005\%$ $2\text{mV/div} \sim 5\text{V/div}$ $500\text{p s/div} \sim 10\text{s/div}$	中检计量
差分探头 N1280A Pro	CCIC-DX-1290	S525021504	2026/05/14	$\text{MPE}: \pm 1\%$ $(0 \sim 14)\text{kVpk}$	中检计量
秒表 PC2810	CCIC-DX-12061	S525038971	2026/08/20	$\text{MPE}: \pm 0.5\text{s/d}$ $(0 \sim 10)\text{h}$	中检计量

8. 校准地点和环境条件：

Place and environmental conditions:

地点： 本公司实验室

Place of Calibration

温度： (22.3 ~ 22.6)℃

Temperature

相对湿度： (55 ~ 61)%

Relative Humidity



校准结果

CALIBRATION RESULT

证书编号：S525061775
Certificate No.

第 3 页 共 6 页
Page of

1、外观及正常性检查：正常
Check on Appearance and Function: Pass

2、试验1(Test1)

2.1 电压

Voltage

设定值	实测值	误差	允许误差	结论
Setting	Measured	Error	MPE	Conclusion
(V)	(V)	(V)	(V)	(P/F)
140	144	-4	± 7	P
380	393	-13	± 19	P

2.2 上升时间

Rise time

实测值	允许范围	结论
Measured	Limit	Conclusion
(ms)	(ms)	(P/F)
1.8	1.5 ~ 2.5	P

2.3 持续时间

Duration time

实测值	允许范围	结论
Measured	Limit	Conclusion
(ms)	(ms)	(P/F)
5.0	3.0 ~ 5.5	P

2.4 时序间隔

Time interval

标称值	实测值	允许范围	结论
Nominal	Measured	Limit	Conclusion
(s)	(s)	(s)	(P/F)
20	19.99	18.0 ~ 22.0	P
60	59.96	58.0 ~ 62.0	P



校准结果

CALIBRATION RESULT

证书编号：S525061775
Certificate No.

第 4 页 共 6 页
Page of

3、 试验2(Test2)

3.1 电压

Voltage

设定值	实测值	误差	允许误差	结论
Setting	Measured	Error	MPE	Conclusion
(V)	(V)	(V)	(V)	(P/F)
140	141	-1	± 7	P
270	274	-4	± 14	P

3.2单相上升时间

Rise time

实测值	允许范围	结论
Measured	Limit	Conclusion
(μs)	(μs)	(P/F)
4.0	1.0 ~ 5.0	P

3.3单相下降时间

Descent time

实测值	允许范围	结论
Measured	Limit	Conclusion
(μs)	(μs)	(P/F)
1.6	1.0 ~ 5.0	P

3.4单相持续时间

Duration time

实测值	允许范围	结论
Measured	Limit	Conclusion
(ms)	(ms)	(P/F)
9.9	9.5 ~ 10.5	P



校准结果

CALIBRATION RESULT

证书编号：S525061775
Certificate No.

第 5 页 共 6 页
Page of

3.5双相上升时间

Rise time

实测值	允许范围	结论
Measured	Limit	Conclusion
(μ s)	(μ s)	(P/F)
4.0	1.0 ~ 5.0	P

3.6双相下降时间

Descent time

实测值	允许范围	结论
Measured	Limit	Conclusion
(μ s)	(μ s)	(P/F)
1.5	1.0 ~ 5.0	P

3.7双相持续时间

Duration time

实测值	允许范围	结论
Measured	Limit	Conclusion
(ms)	(ms)	(P/F)
10.1	9.5 ~ 10.5	P

3.8双相换相时间

Duration time

实测值	允许范围	结论
Measured	Limit	Conclusion
(μ s)	(ms)	(P/F)
2.4	≤ 2	P



校准结果

CALIBRATION RESULT

证书编号: S525061775
Certificate No.

第 6 页 共 6 页
Page of

3.9时序间隔

Time interval

标称值	实测值	允许范围	结论
Nominal	Measured	Limit	Conclusion
(s)	(s)	(s)	(P/F)
20	19.99	18.0 ~ 22.0	P
60	59.98	58.0 ~ 62.0	P

说明(Notes)

1、本次校准的测量不确定度

Measurement Uncertainty in Calibration

1.1 依据JJF 1059.1-2012 测量不确定度评定与表示

Conform JJF 1059.1-2012 *Evaluation and Expression of Uncertainty in Measurement*.

1.2 本次测量结果的扩展不确定度 ($k=2$)

The Expanded Uncertainty of the Measurement Results

—— 电压(Voltage)	$U_{rel} = 4\%$
—— 电流(Current)	$U_{rel} = 4\%$
—— 时间(Time)	$U_{rel} = 3\%$

以下空白

End of Report