

PTI[®] 派捷
Professional Test Inc

— 专业电测设备制造商 —

PTI-500X

Fully automatic first article tester

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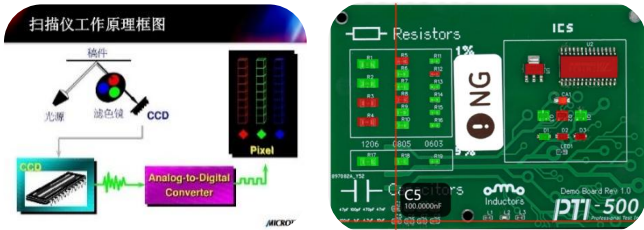


1.1 Product Introduction——PTI-500X

CMOS camera >>>

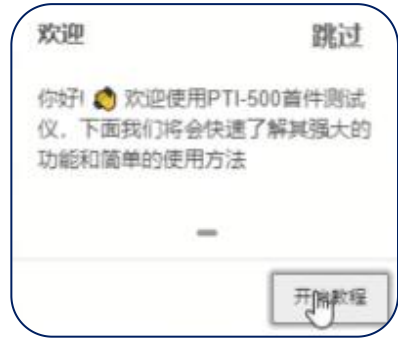
Quick scan of pictures, **Automatically judge the resistance value,**

Component character, component polarity



software >>>>

easy to use, comes with a tutorial
good compatibility, custom format



<<< LCR bridge

compatible **Different brands of LCR bridges**
Test capacitance, resistance, inductance, etc.

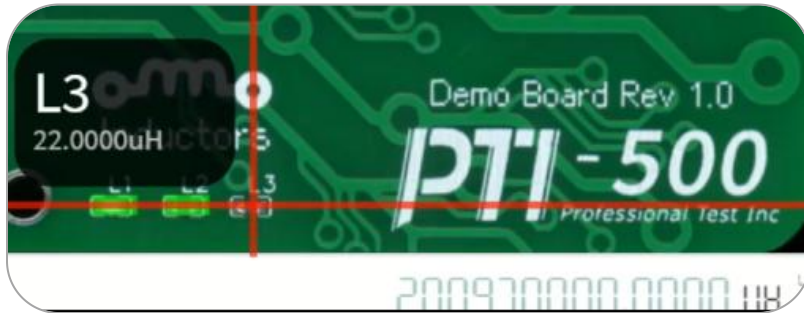


PTI-让测试更精确!



1.2 Product Introduction - Function Introduction

LCR Autotest



AOI visual inspection



Combination of both

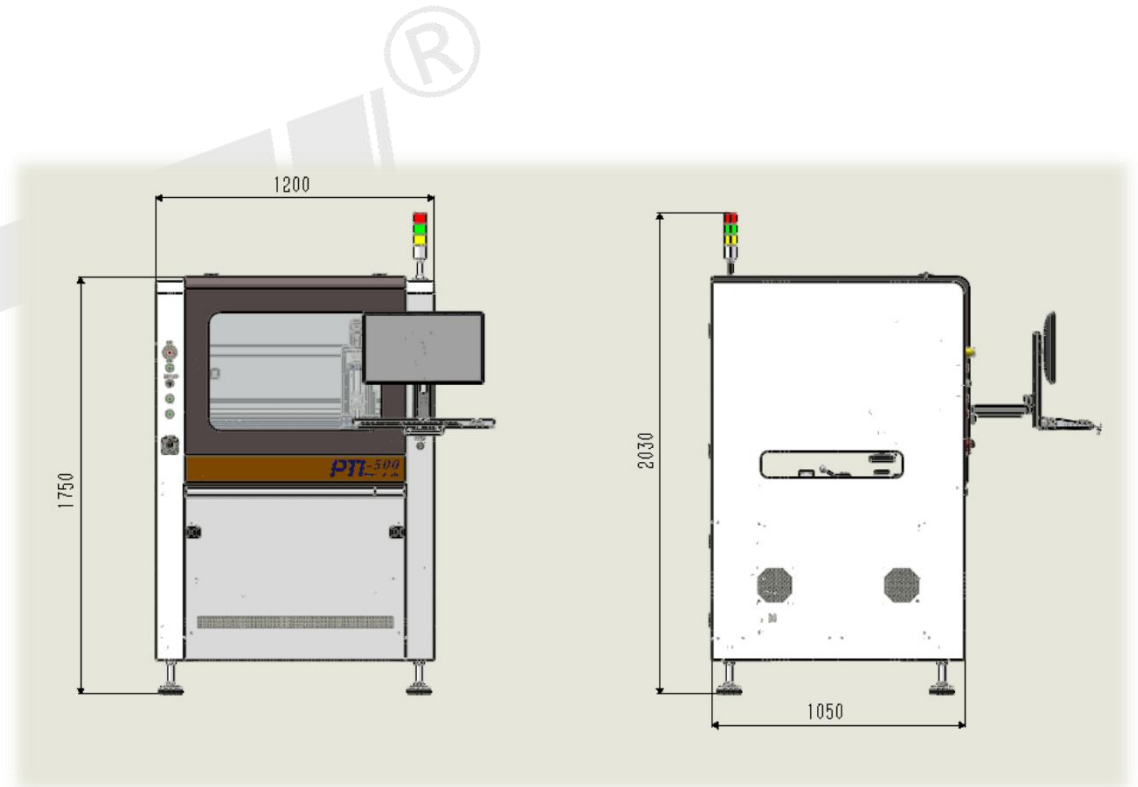
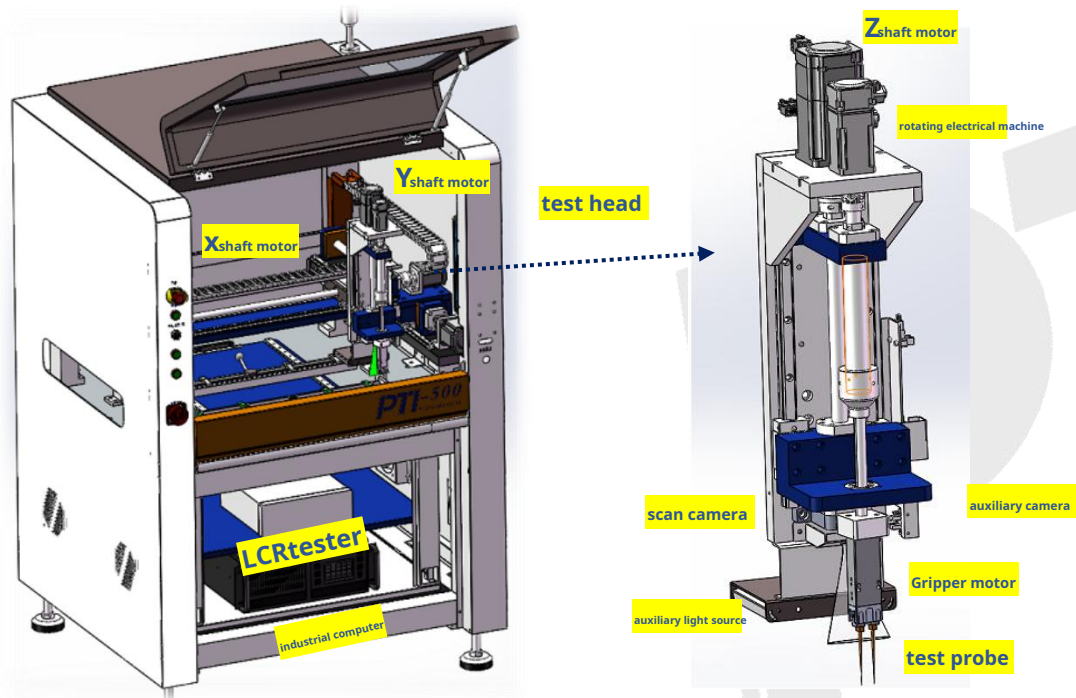


测试中 (37/39) (#1/1)

编号	结果	标准值	测试值	单位
C6	PASS(LCR)	1.0000	0.944231	uF
C7	PASS(LCR)	4.7000	4.68215	uF
C3	PASS(LCR)	470.0000	474.452	pF
C4	PASS(LCR)	47.0000	45.4145	nF
C8	PASS(LCR)	10.0000	9.02956	uF
L1	PASS(LCR)	150.0000	165.087	nH
L2		1.5000	---	uH
L3		22.0000	---	uH
R19	PASS(AOI)	51.0000	51	kΩ
R18	PASS(AOI)	10.0000	10	kΩ



1.3 Product Introduction——Equipment Structure



Support online (offline) two ways



1.4 Product Introduction - Module Introduction

Light
study
check
Measure
mo
piece

serial number	bad type	standard	bad
1	component error different resistance		
2	encapsulation error 0805 by mistake 0603		
3	precision error 1% by mistake 5%		
4	wrong polarity element reverse		
5	missing parts Not uploaded		
6	IC character recognition wrong model		

L
C
R
check
Measure
mo
piece

serial number	components	standard	bad
1	inductance	150uH	200uH
2	capacitance	10NF	100NF



1.5 Product Introduction - Comparison of Equipment Advantages

project	Tradition	peers	PTI-500X
examination range	not limited	550*500mm	
component size	more than the0402	01005The above components do not need to change needles	
Check method	artificial	fully automatic	
Report recording method	artificial	automatic	
Quality traceability	/	have	
operators	2	0	
system security	Data is easily lost	User permission settings to avoid accidental deletion of data	
way of judging	Manual discrimination	software judgment	
test speed	average:3Sec/indivual	average:1 Sec/indivual	Average: 1 Sec/piece
automatic calibration	/	/	autocheck(coordinates,LCR)
multi-screen projection	/	screen display	mobile screen
Test pass rate	/	95%	98%
optical algorithm	/	Image comparison+OCR	AIsmart+OCR
programming	/	Need to coordinate,BOMmake extensive revisions	Intelligent Recognition , Compatible with all kinds of files, one-click import
The results show	manual report	component list	Component list+ global display



2.1 Software Introduction - Operation Guide



Introduction to page layout



multi-lingual



Compatible with different BOM



New Construction Guidelines



coordinate adjustment



multi-format report



2.2 Software Introduction - Results Visualization

编号	结果	标准值
R17	PASS(AOI)	100.0000
R4	FAIL(AOI)	470.0000
R3	FAIL(AOI)	100.0000
R2	PASS(AOI)	4.7000
R1	PASS(AOI)	0.0000
R5	FAIL(AOI)	10.0000
R6	PASS(AOI)	100.0000
R7	PASS(AOI)	1.0000
R8	FAIL(AOI)	10.0000

LCR:

C4,C8,L1,L2Wrong piece

vision:

R4,Q2,D3,CA1Wrong piece D2,
U2opposite polarity

R5encapsulation0805misposted0603

R3,R8 1%Resistor mislabeled5%

Not only the results are prominently displayed in the list
In , the global picture is drawn more intuitively
result

3. Programming

CCD scanning (automatic)



import coordinates file



Positioning components



Import BOM, locate components
specific location





4.1 DEMO test display-OK board

自动光学检测结果: 总数: 28 PASS:28 FAIL:0

Q3

板号	编号	标准图例	实测图例	标准值	封装	误差范围	检测值	结果
1	R11			S1.000	R0603	1%	S10(S10) 5.875x(3.875m(0603)) 1%	PASS
1	Q1			JJY	SOT-23-3_L2.9-W1.6-P1.30-L52-8-8R	15%	极性正确(0.04668394)	PASS
1	U1			AMS1117	SOT-223	1%	AMS1117 极性正确(0.01322928)	PASS
1	U2			TM1638	SOIC-28	15%	极性正确(0.00644906) M1638	PASS

Detect polarity, packaging, accuracy, wrong parts, missing parts

测试中 (32/39) (#1/1)

编号	结果	标准值	测试值	单位
C8	PASS	100.0000	100.4698	nF
C1	PASS	47.0000	47.9441	pF
C2	PASS	100.0000	100.4518	pF
C6	PASS	1.0000	0.944251	uF
C7		4.7000	—	uF
C3		470.0000	—	pF
C4		47.0000	—	nF
C8		10.0000	—	nF
L1		100.0000	—	mH
L2		1.0000	—	uH

#1

手动PASS 手动FAIL

Measure capacitance, inductance and other optical detection through the bridge

Arrived components



4.2 DEMO test display-NG board

文件 设置 帮助 PTI-500 v.1.11.27 - PTIDEMO.M

自动光学检测结果统计: 总数: 28 PASS:16 FAIL:12 2022/05/12 11:36 语言切换 1

R4

标准品	实测品	标准值	封装	误差范围	识别值	结果
		SIM	20x14.0x1.0mm	±1%	SIM	PASS
		470.00Ω	R1206	1%	4701(4.7KΩ) 9.500e5(875nH) 1%	FAIL
		100.00Ω	R1206	1%	1003(100KΩ) 7.875e4(750in)(805) 1%	FAIL
		10.00Ω	R0805	1%	10.00Ω	FAIL
		10.00Ω	R0805	1%	103(10KΩ) 7.625e5(0.00in)(805) 5%	FAIL

The test result fails, and the component displays the positioning coordinates

Show red FAIL

Detect polarity, packaging, accuracy, wrong parts, missing parts

文件 设置 帮助 PTI-500 v.1.11.27 - PTIDEMO.M

自动视觉检测

测试中 (37/39) (#1/1)

编号	结果	标准值	测试值	单位
C6	PASS	1.0000	0.972142...	uF
C7	PASS	4.7000	4.64603	uF
C8	PASS	470.0000	466.7096...	uF
C4	FAIL	47.0000	980.0559...	nF
C8	FAIL	10.0000	0.046809...	uF
L1	FAIL	150.0000	20184.7	mH
L2		1.8000	—	uH
L3		23.0000	—	uH
R18	PASS	51.0000	51	Ω

输入关键字搜索

#1

测试完成: 最佳路径

手动PASS 手动FAIL



THANKS

Thanks for watching

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