

First Article Inspection / Verification System for PCB

Electrically and Optically Verify Identified SMD in PCB (Printed Circuit Board) Assemblies Before Mass production

n=1 Checker Series

Benefits

Rapidly and Accurately Verify Identified Mounting Errors of PCB in the 1st Product of New Assembly Production or Changeover for Prototype or Pre-Production.

Eliminate Human Errors Related Faults and Reduce Time Consumption to Rework for Developing to Provide Highly Productivity and Cost-Effectively.

Automate Providing Traceability Electric Test Data Reporting and Data Management for Internal and Customers Use as Reference Data of Quality Assurance.

Test Area Information:

Desktop Model	Medium Size: 330 mm x 250 mm	Large Size: 510 mm x 380 mm
---------------	------------------------------	-----------------------------

* Japanese and Chinese Version Available



Functions

Automate Measuring SMD (Chip Capacitors and Chip Resistors) by an LCR Meter, and then Verifying and Judging Inspection / Verification.

Support Human Optical Inspection / Verification Mode that Allows Mounting SMD Status to Inspect and Verify (Type of Component, Component Format, Descriptions Dimensions Orientation, Polarity, and Printed Alphanumeric Characters) on the Display Monitor.

Automate Generating Test Program with the Mounting Data and Component Parts List (Parts Library).

n=1 Checker X Series

Features

1 Automate Impedance Measurement System

Accurately automate measuring CR (Capacitance and Resistance) using probes by an LCR meter, and enables the n=1 Checker to automate verifying and judging the measurement results compared with the Parts Library as well as automated save all data into the database. All data can be used for both internal and customers' quality assurance.

2 Human Optical Inspection / Verification System

Supporting a CCD camera that automates verifying the identified mounting status of each component on the display monitor of the n=1 Checker, and enables it to visually inspect showing optical inspection results compared with the Parts Library(e.g., type of description in printed alphanumeric characters, orientation, dimension, polarity, and Pin #1 identification).

3 Test Program Generator (TPG)

TPG is a program that automates generating test program from mounting data and component Parts List (Parts Library) for the n=1 Checker.

List of Data Items Generated

Component Type (C or R), Location, Component /Parts Code, Mounted X-Y Coordinates, Component Size, Component Height, Mounting Angle, Constant Value, Lower /Upper Limit , Operation Flag, Printed Alphanumeric Characters, Test Mode.

4 Other Software Features

The software is designed for user convenience and ensures work efficiency. Functions for component height search and workpiece offset acquisition are built in.

Functions for manual robot movement, data logging, inspection for takt-time indication and video screen rotation, as well as a check function in reconfirmation mode, are supported.

Specifications

	Medium(M) size	Large(L) size
Net Weight	92kg (203 lbs.)	118kg (260 lbs.)
Dimensions	W:660 x D:805 x H:625 mm (Approx. W:2.17 x D:2.64 x H:2.05 ft)	W:860 X D:975 X H:640 mm (Approx. W:2.82 x D:3.20 x H:2.10 ft)
Test Area	X:330 mm (13.0") Y:250 mm (9.8")	X:510 mm (20.0") Y:380 mm (15.0")
	Max. Component Height: 13.9 mm (0.54") [above the PCB Surface]	
Test Duration	1 Second per Component (Typically)	
# of Measurement Steps	Max. 10,000 Steps	

Impedance Measurement

Component Test	2-terminal chip capacitors, 2-terminal chip resistors, chip-type module resistors
Component Size	0603, 1005, 1608, 2012, 3216 (3225), 4532, and 5025 [0402 optional] mm 0201, 0402, 0603, 0805, 1206, 1812, and 2010 [01005 optional] inch
Component Mounting Angle	0, 90, 180, and 270 degrees [45 degrees or Free Angle degrees optional]
Measurement Range	C: 0.94 pF to 199.99 mF; R: 0.01Ω to 19.99 MΩ (on independent C and R scales)
Measurement Voltage	1.2 Vrms

Human Optical Inspection / Verification Support

Component Display Area	6 x 4 mm (461 dots horizontally x 307 dots vertically)
Collation Display Area	Component size, mounting angle, printed alphanumeric characters for type descriptions, 1-pin direction, positive orientation, cathode orientation, missing component

*ALL SPECIFICATIONS AND DATA FOR THE n=1 Checker ARE SUBJECT TO CHANGE, MODIFY, OR OTHERWISE FOR IMPROVING THE PRODUCT QUALITY WITHOUT NOTICE.



Head Office

979 Kita-Tsuchiyama, Tsuchiyama-cho, Koka, Shiga 528-0211 JAPAN
 Phone : +81-748-66-1681 Facsimile: +81-748-66-0915
 URL: www.newly-t.com E-mail: nltmail@newly-t.com

DISTRIBUTED BY

Seika Machinery, Inc



Los Angeles Head Office & Demo Center
 21241 S. Western Ave., Suite 900, Torrance, CA 90501
 Main: 310-540-7310 FAX: 310-540-7930

Atlanta Office & Demo Center
 1580 Boggs Rd., Suite 900, Duluth, GA 30096
 Main: 770-446-3116 FAX: 770-446-3118

San Francisco Office
 23785 Cabot Blvd., Suite 306, Hayward, CA 94545
 Main: 510-293-0580 FAX: 510-293-0940



www.seikausa.com