



## 1107-51 UNIT HiTESTER

Automatic Testing  
Equipment



Short Tact Time

# Max. 2.5 sec/pc



The 1107-51 UNIT HiTESTER is a bare board tester employing a test head (inspection jig) that is suitable for batch inspection and inspection of mass-produced fine-pitch boards. Integration of the handler and the inspection unit allows test boards to be supplied, alignment, inspected, evaluated, and forwarded in an uninterrupted sequence, and increases speed by reducing tact time to a maximum of 2.5 seconds per piece.

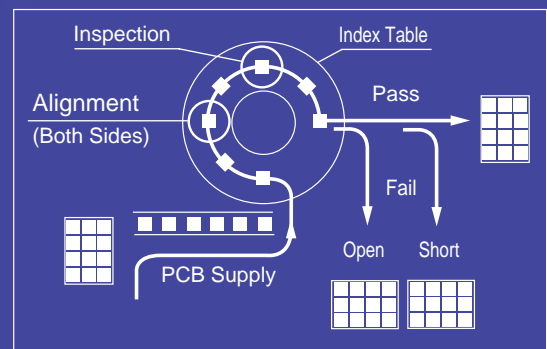


ISO14001  
JQA-E-90091



<http://www.hioki.co.jp/>

HIOKI company overview, new products, environmental considerations and other information are available on our website.



## ■ Specifications

### [Mechanism part]

#### ■ XY axis unit (Applies to both top and bottom sides)

Test board dimensions : 10 × 10 mm to 75 × 75 mm  
Board thickness : 0.3 to 3.2 mm (not possible in all cases. Please consult us regarding particularly thin or thick boards)  
Travel resolution : 1.25 μm  
Position repetition : Within ±10 μm

#### ■ Theta axis unit (Applies to both top and bottom sides)

Position repetition : Within ±3 sec.  
Rotation range : ±3° (during measurement)

#### ■ Z axis unit (Applies to both top and bottom sides)

Travel stroke : Upper;3 mm,Lower;5mm (automatic inspection mode)  
Position repetition : ±10 μm

#### ■ Index table unit

Loading height : 900 mm ±10 mm  
Position repetition : ±3 sec.

#### ■ Tact time

Condition : Conductivity/insulation inspection of 1024 points at 2 points per pattern  
Tact time : 2.5 seconds per piece

#### ■ Test head

Probing area : 10 × 10 mm to 80 × 80 mm  
Max. number of pins: Max. 4096 pins for each surface (Max. total for upper and lower surfaces: 8192 pins)  
Probe interval pitch : Min. 150 μm (Consultation is required for 110 μm)

### [Measuring unit]

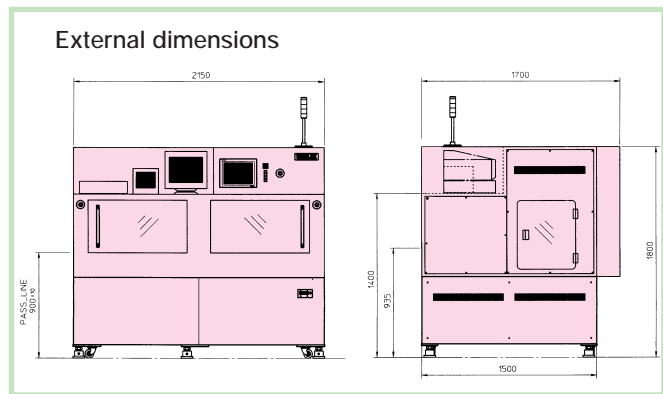
No. of test points : Standard 1024 pins (expandable up to 4096 pins)  
Max. 8192 pins (optional)  
No. of test steps : Component test data max. 5000 steps (only data equivalent to 1 piece is held as test data)  
Insulation test : FAIL when LEAK  
Resolution can be set in 1 V units  
DC 0.1 V/ 1Ω to 200 V/ 200 MΩ  
Continuity test : FAIL when OPEN  
Test voltage: DC 0.1 V  
Measurement range: 4 Ω to 400 kΩ  
Measurement time : 0.4 sec/1024 points (1 pattern/2 points, conforming article measurement, insulation test; 200 V/ 20 MΩ, continuity test; 50 mA/ 100 Ω)

Component test : Insulation test  
DC 0.1 V/ 1Ω to 200 V/200 MΩ  
: Continuity test  
Rated voltage measurement: 4 Ω to 400 kΩ/0.1 V  
Rated current measurement: 0.1 Ω/100 mA to 1 MΩ/1 mA  
: Resistance: 0.4 Ω to 40 MΩ  
: Capacitance: 10 pF to 400 mF  
: Coil: 1 μH to 400 H  
: Diodes, transistors: 0.1 V to 25 V  
: Zener diodes: 0.1 V to 25 V  
: Measurement time  
From approximately 1.7 msec/step

### [General specifications]

Power supply : AC 200 V ±10% (single phase) 50/60 Hz  
Power consumption: 4 kVA  
Pneumatic system : Primary pressure: 0.6 to 0.99 MPa (dry air)  
Setting pressure (secondary side): 0.5 ±0.1 MPa  
Operating environment : Operating temperature and humidity:  
23°C ±3°C, 60% rh max. (no condensation)  
: Storage temperature and humidity:  
10°C to 43°C, 80% rh max. (no condensation)  
(same as for using the test heads)  
: Atmosphere: Avoid use in an atmosphere where dust, vibrations or corrosive gases may occur.  
: Floor strength: 500 kg/m<sup>2</sup> or higher  
Insulation resistance: 100 MΩ or higher  
(DC 500 V between power supply and cabinet)  
Withstand voltage : AC 2.2 kV RMS  
Accessories : PC accessories (such as a keyboard), 40-character width thermal printer, printer cable, printer buffer, leveling jacks, and maintenance tool set

Main unit dimensions: Approx. 2150 (W) × 1800 (H) × 1700 (D) mm (excluding protruding parts)  
Mass : Approx. 1000 kg



## 1107-51 UNIT HiTESTER (DOUBLE-SIDED ALIGNMENT)

### ● Options

1138 SCANNER BOARD (128-pin unit)

1911 SCANNER BOX EXTENSION (2048-pin unit)

# HIOKI

HIOKI E. E. CORPORATION

HEAD OFFICE :  
81 Koizumi, Ueda, Nagano, 386-1192, Japan  
TEL +81-268-28-0562 / FAX +81-268-28-0568  
E-mail: os-com@hioki.co.jp

HIOKI USA CORPORATION :  
6 Corporate Drive, Cranbury, NJ 08512 USA  
TEL +1-609-409-9109 / FAX +1-609-409-9108  
E-mail: hioki@hiokiusa.com

TKK HIOKI CO.,LTD :  
NO.66-8,Sec.2,Nan Kan Road,Lu-chu,  
Taoyuan,Taiwan,R.O.C.  
TEL +886-3-311-7260 / FAX +886-3-311-8236

HIOKI E.E.CORPORATION Singapore Representative Office :  
12 New Industrial Road,#02-04 Thoren Technocentre,Singapore 536202  
TEL +65-288-0050 / FAX +65-282-2283  
E-mail: kensoh@hioki.per.sg

DISTRIBUTED BY