

Automatic insulation testing and AC/DC voltage endurance testing

## Multi-point Automatic Testing for High Voltages

**Max. 32 ch**



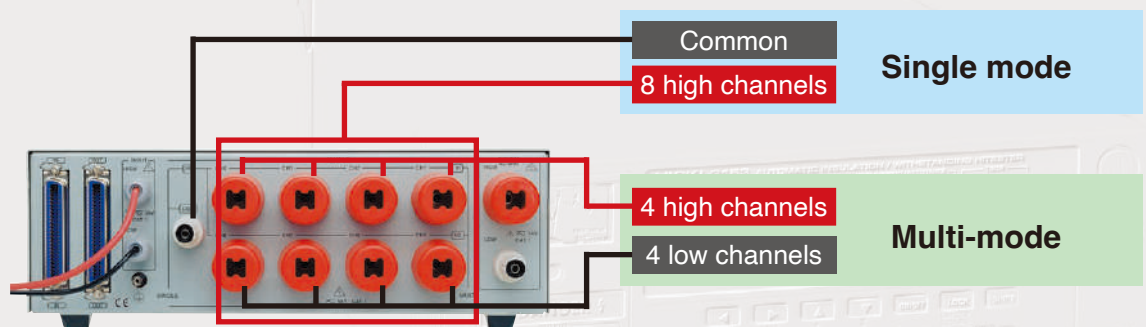
The 3930 is a high voltage scanner that allows high voltage inputs to be output from any channel. A single unit is equipped with 8 channels (using single mode), and up to four units can be connected to give a total of 32 channels. In addition, the 3930 can be used in combination with the AUTOMATIC INSULATION/WITHSTANDING HiTESTER 3153, displaying its capabilities as an unattended automatic testing device for multiple point insulation and AC/DC voltage endurance testing.

### ● Emphasis on Safety

The 3930 features isolated high voltage input and output, as well as insulated control signal lines and an insulated power cord. Further, when multiple units are connected, the 3930 can detect wrongly set (duplicated) IDs and stop all output.

**2 modes**

The 3930 has two operation modes, single mode and multi-mode. The single mode has a common channel with eight high channels, while the multi-mode has four high and four low channels, and the 3930 can scan any point on these channels.



# Control the 3930 using a multi-purpose sequencer

In addition its control using the 3153's program function, the 3930 is a multi-purpose high voltage scanner that can be controlled using general logic and a sequencer.

A maximum of four units can be connected at any one time.

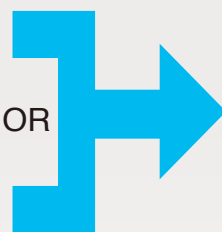
- When using the 3930 in combination with the 3153, a separate power source is not necessary, since power is supplied from the control signal input connector.



3153

Sequencer

OR



## ■ Functions

Operation modes	: Multi- and single modes
Mode setting method	: External switch
Number of channels	: Multi-mode; 4 high channels and 4 low channels Single mode; 8 high channels and a common channel
Rated voltage used	: AC 5 kV/DC 5 kV
Operation display	: The lamp lights when power is supplied to the unit The lamp lights when the specified channels are used
Control method	: General-purpose control

## ■ Relay area

Maximum open and closed voltage	: 5000 V DC, 5000 V AC
Maximum open and closed current	: 1.0 A (open and closed capacity: 50 W)
Contact point indirect contact resistance	: 500 mΩ or less, with 1 mA AC
Contact point maximum capacity	: 50 W
Operation time	: 6 ms or less
Recovery time	: 6 ms or less

## ■ Control signal

ID authentication signal	: ID_XE_OUT: ID exists (X; 0 to 3) ID_XE_OUT: ID overlapping (X; 0 to 3)
Signal level	: The signal level voltage (V <sub>ISO_V</sub> ) is input externally, and the voltage (V <sub>ISO_V</sub> ) must be within the range 5 V to 24 V
Input signal level	: Hi; V <sub>ISO_V</sub> + 1.0 V max., V <sub>ISO_V</sub> - 1.5 V min. Lo; V <sub>ISO_V</sub> - 4.0 V max., V <sub>ISO_COM</sub> - 0.5 V min.
Output signal level (with no load)	: Open collector output Hi; V <sub>ISO_V</sub> max., V <sub>ISO_V</sub> - 0.5 V min. Lo; V <sub>ISO_COM</sub> + 0.5 V max., V <sub>ISO_COM</sub> - 0.5 V min.

## ■ General specifications

Degree of Accuracy	: Standards for current leakage when applying voltage Single mode, no output cable, and all output relays turned on for both AC and DC. When applying DC (1000 V); 0.1 μA or less/unit When applying AC (5 kV, 50/60 Hz only); 0.4 mA or less/unit (Differs depending on the status of the connection cable)
Operation temperature range	: 0°C to 40°C, 80% rh or less (no condensation)
Storage temperature range	: -10°C to 50°C, 90% rh or less (no condensation)
Operation environment	: Indoors, altitude of 2000 m or less
Withstand voltage	: High voltage terminal - between the chassis: AC 10 kV, 10 mA, 1 min
Power	: V <sub>SCV</sub> 24 V DC, ±10% (applied using the control signal input connector)
Maximum rated power	: 12 VA
Dimensions and mass	: 316 mm (12.44 in)W × 100 mm (3.94 in)H × 350 mm (13.78 in)D, 4.2 kg (148.1 oz)
Standard accessories	: Control input connector connection cable ×1, H.V. Test lead 9615-01 (red) ×8, H.V. Test lead (black) ×1, Grounding cable ×1, Instruction manual ×1
Conformance standards	: EMC; EN61326-1:1997+A1:1998 CLASS A Safety; EN61010-1:1993+A2:1995 Power supply unit Degree of pollution: 2, overvoltage category I (anticipated overvoltage category: 330 V)
Other	: Output prevention protection circuit using the ID authentication signal Output prevention protection circuit using the mode authentication signal LED display of the terminal being output

### Model : HIGH VOLTAGE SCANNER 3930

Model No. (Order Code) (Note)

3930 (For the 3153 and similar products)

Accessories: Control input connector connection cable ×1, H.V. Test lead 9615-01 (red) ×8, H.V. Test lead (black) ×1, Grounding cable ×1, Instruction manual ×1



\* The 9615-01 is bundled

H.V. TEST LEAD 9615-01  
Red, high voltage side, 1.5 m (4.92 ft) length

Note: Company names and product names appearing in this brochure are trademarks or registered trademarks of various companies.

# HIOKI

HIOKI E. E. CORPORATION

## HEADQUARTERS

81 Koizumi,  
Ueda, Nagano 386-1192 Japan  
<https://www.hioki.com/>



Scan for all  
regional contact  
information

DISTRIBUTED BY