AC mΩ Meter

Model: 356M / 5811-71

The model 356M is a compact sized AC mΩ with multi scanner for measurement of resistance and voltage of the specimen. It enables to scan specified CHs automatically. By connecting expansion unit 5811-71, 356M can measure up to 40 CHs. Measured data of 356M can be transferred to PC by using unitility software.

- AC mΩ meter with max. 40CH extension.
- Resistance range: 30mΩ / 300mΩ / 3Ω
- Open terminal voltage: 20mV peak or less
- Enables to measure cell voltage and resistance of rechargeble battery and fuel cell.
- 2 outputs of upper comparison judgment

■ Model Designation

Main unit

Model	No. of CH
356M-05	5CH
356M-10	10CH
356M-15	15CH
356M-20	20CH

Scanner exptension unit

Model	No. of extened CH
5811-71-05	5CH
5811-71-10	10CH
5811-71-15	15CH
5811-71-20	20CH

■ Measurement range

●Resistance measurement

Range※1	30.000 mΩ	300.00 mΩ	3.0000 Ω
Resolution	1 μΩ	10 μΩ	100 μΩ
Measured Current	7.4 mA	1 mA	100 μA
Accuracy※2	±(0.5% of rdg. +8digit)		
Open terminal voltage	20 mV Peak or less (with ON/OFF function)		

※1 The same range for all, ※2 Specified at 23 ℃ ± 5 ℃, 45 to 75 %RH

●Voltage measurement

Range※1	± 5.0000 V	± 50.000 V
Resolution	100 μV	1 mV
Accuracy※2	± (0.05 % of rdg. + 5 digit)	

※1 The same range for all, ※2 Specified at 23 ℃ ± 5 ℃, 45 to 75 %RH

■ Resistance measurement

●Measurement mode

Automatic (AUTO)

Resistance and voltage of CH1 to the specified CH.

Manual (MANU)

Resistance and voltage of specified CHs

●Scanning time

1 point/1 s or 2 s (Automatic)

Measurement time for 1 s = approx. 900 ms,

Measurement time for 2 s = approx. 1900 ms

●Comparison judgment

Upper value(H1, H2) 2 points set

Output condition :

Resistance of more than 1 CH > H1･･･H1 relay is ON

Resistance of more than 1 CH > H2･･･H2 relay is ON

Contact capacity: AC250V, 1A (Resistance load)

1a (N.O.) relay contacts

■ Data output

Interface : RS-232C Start-stop synchronous full-duplex method

(During shipment) 9600bps 8bit, No parity, No control of Xon,Xoff

■ General Specifications

Measurement method : AC Four-Terminal method (for resistance)

A/D operation method : Δ-Σ method

Measuring frequency : AC 1 kHz ± 20 Hz (for resistance)

Resistance of lead wire : Less than 0.1 Ω (SOURCE Hi - SOURCE Lo)

Display : LCD display with zero-suppress function

35000/resistance measurement

± 50000/voltage measurement

"OVER" is displayed, when the value is over the value.

Unit : mΩ, Ω, V

Sampling cycle : 10 times/s (resistacne and voltage measurement)

Response speed : Approx. 670ms

Parameter retention : Retained by EEPROM

Power supply : AC 100 V to 240 V 50/60 Hz

Power consumption : AC 200 V Approx. 10 VA (356M) ,

AC 200 V Approx. 7 VA (5811-71)

Operating ambient temp. : 0 to 50℃

Storage temperature : - 20 to 70℃

Weight : Approx. 1.2 kg both 356M and 5811-71

Accessories 356M : Power cord, Fuse, Utility software, RS-232C cable, Operation manual

5811-71 : Power cord, Fuse, Connecting cable of expansion unit

■ Utility software (Install in PC)

Function : Setting of measurement condition like range, comparison value, interval time

: Start/Stop, Data saving and protection, display of saved file

: Data transmission

356M / 5811-71

AC mΩ Meter

【 356M Main body 】
Measurement CH : 1 to 20 CH

【 356M Main body + 5811-71 Extension unit 】
Measurement CH : 1 to 40 CH

【 Measurement cable 】

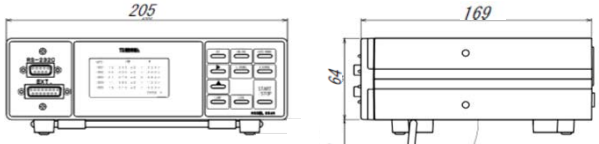
< Option >

■ Setting range of functions and Initial setting

Item	Setting range / Content	Initial value
Measurement range	Resistance measurement range: 30 mΩ, 300 mΩ, 3 Ω Voltage measurement range: ± 5 V, ± 50 V	3 Ω, 50 V
Measurement mode	Automatic mode (AUTO) : Measuring from CH1 to the specified CH. The output of the measured data can be obtained by the command from PC. Automatic mode (FULL) : The output of each mesured data of each CH can be obtained. Manual mode (MANU) : Specified CH is measured.	Automatic mode (FULL)
Keylock	Prevention of mis-operation ON/OFF	OFF
Max. CH number (automatic)	Max. 40 CH, when 5811-71 is connected.	20
CH number (manual)		01
Comaprator	2 points of upper limit, Relay, Buzzer and H1/H2 are output, when displayed in reversed color.	H1 : 3.0000 Ω, H2 : 3.0000 Ω
Buzzer	Output according to comparator. Volume setting: 0 to 10	OFF,Volume 5
Scanning time (automatic)	Select : 1 s/CH or 2 s/CH	1 s
Setting of voltage limit	Restriction function, when SOURCE terminal open voltage is less than 20 mV ON/OFF	OFF
Setting of current output mode	Fixed mode : Output from CH1 constantly. (From CH21, when 5811-71 is connected.) Individual current mode : Output from the measured CH.	Fixed mode
Communication setting	Transmission method: Start-stop synchronous full-duplex method Transmission speed: 9600, 4800, 2400 bps Data length: 7 bits, 8 bits Parity: None, Even, Odd Stop bit: 1 bit Xon, Xoff : No control	9600, 8, None, 1

■ External dimensions

•356M main unit



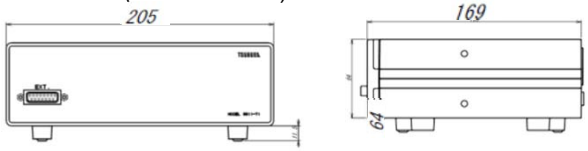
Front view

Side view

Rear view

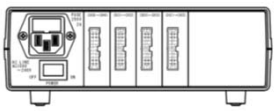
Unit: mm

• 5811-71 (Extension unit)



Front view

Side view



Rear view

Unit: mm

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