



Suitable for a range of purposes from hobby use to maintenance of electric equipment



General Specification	
Measurement functions:	AC voltage, DC voltage, AC current(732 01~03 only), DC current(732 01~03 only), resistance, continuity, di- ode and capacitance (732 02/03 only)
Additional functions:	Automatic hold, manual range selection, over-range alarm, and automatic power-off (after approx. 20 min- utes)
Display:	An LCD display that is capable of indicating a signifi- cant reading of up to 4300 counts (Note) along with the various indications of the unit and function. It shows the negative polarity only; no indication is given for positive polarity. It also has an OL over-range indica- tion and end w-battery alarm indication.
	ost significant reading is 210 counts for the diode test and 2300 counts capacitor test.
Range selection:	Manual or automatic
Samplings:	2 times/sec
Operating temperature and humidity range	ges:0°C to 50°C (accuracy guaranteed range : 23 $\pm$ 5°C); non-condensing (where, the range is 0°C to 40°C for a humidity of 80% RH or below and 40°C to 50°C for a humidity of 70% RH or below)
Temperature coefficient:	Add (accuracy $\times$ 0.1)/°C for the ranges of 0°C to 18°C and 28°C to 50°C
Storage temperature and humidity ranges:	-20°C to 60°C at 70% RH maximum; non-condensing
Power supply:	AAA-size batteries (ANSI)2
Battery life:	Approximately 600 hours by alkaline batteries (of con- tinuous battery-operation)
External dimensions:	74 (W) $\times$ 155 (H) $\times$ 31 (D) mm (excluding projections)
Weight:	Approx. 240 g (including batteries)
Approvable standards Safety standards:	BS EN61010-1:1993 + Amendment (600V CAT. II; 300 V CAT. III;Pollution degree 2,Indoor use):732 01-03 (600V CAT. III;Pollution degree 2,Indoor use):732 04 BS EN61010-2-031:1995
EMC standards:	EMI(electromagnetic interference): EN55011:1991 (Class B, Group 1) EMS(electromagnetic susceptibility): EN50082-1:1997
Effect of EMS immunity:	
Accuracy of reading:	[Rated accuracy + 5.0% of each range (4000 counts)] for electromagnetic field with a radio-frequency of 3 V/m
Operable altitude:	2000m or less above sea level
Accessories:	Batteries(housed in the instrument) 2           Testing leads

#### rical Speci Test conditions:

Specification

Temperature and humidity: 23 ±5°C at 80% RH maximum  $\pm$ (percentage of reading + number of LSD reading) Accuracy:

# Note: The response times noted below were measured in the Range Hold mode (manual range setting).

### ●DC Voltage Measurement (....V)

D D I f		Accuracy			Input	Maximum
Range	Resolution	732 01	732 02/04	732 03	Resistance	Input Voltage
400mV	0.1mV	0.5%+1		0.3%+1	>100MΩ	
4V	0.001V	0.5%+1			11MΩ	
40V	0.01V		0.5%+1			600V
400V	0.1V	0.75%+1	75%+1		10MΩ	
600V	1V					

Response time: 1.5 sec maximum for the 400 mV range and 1 sec maximum for other ranges

## •AC Voltage Measurement (~V)

	Mean-value detection and rms-value calibration.						
	Banga	Resolution Accuracy(40-500Hz)		0Hz)	Input	Maximum	
	Range	Resolution	732 01	732 01 732 02 73		Resistance	Input Voltage
	4V	0.001V	1%+5			11MΩ<50pF	
	40V	0.01V			0.75%+5		600Vrms
	400V	0.1V			0.707010	10MΩ<50pF	600vrms
	600V	1V					
Ì	Response time: 2 sec maximum						

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# ●DC Current Measurement (...A) \*This function is not supported on the 732 04

Range		Decelution	Accuracy		Voltage	Maximum		
	Range	Resolution	732 01	732 02	732 03	Drop	Input Current	
μA	400µA*1	0.1µA				<0.17mV/µA 400 mA		
μΛ	4000µA	1μΑ	1%+2		<0.171117/μΑ	400 mA The input is protected by a 500 mA/250 V fuse.		
mA	40mA*1	0mA*1 0.01mA			<3mV/mA			
mA	400mA	0.1mA					<5mv/mA	
A	10 A*2	0.01A	2%+2			10 A The input is protected by a 15 A/250 V fuse.		

\*1 These ranges may produce a readout error equivalent to several times their resolution.
\*2 A current of 11 to 20 A can also be measured if the time interval is kept within 30 seconds. The buzzer will sound if the interval exceeds 30 seconds. Response time: 1 sec maximum

#### ●AC Current Measurement (~A) \*This function is not supported on the 732 04. N.4.

IVIE	Mean-value detection and rms-value calibration.					
	Banga	Resolution	Accuracy(40-500Hz)	Voltage	Maximum Input Current	
	Range	Resolution	732 01 732 02 732 03	Drop		
μA	400μA*1	0.1µA	2%+20	<0.17mV/µA	400 mA The input is protected	
μ	4000μA	1μΑ	2%+5			
m	40mA*1	0.01mA	2%+20	<3mV/uA	by a 500 mA/250 V fuse.	
	` 400mA	0.1mA	2%+5	<3117/μΑ		
A	10A <sup>*2</sup>	0.01A	2.5%+20	<0.04V/A	10 A The input is protected by a 15 A/250 V fuse.	

\*1 These ranges may produce a readout error equivalent to several times their resolution. \*2 A current of 11 to 20 A can also be measured if the time interval is kept within 30 seconds. The buzzer will sound if the interval exceeds 30 seconds. Response time: 2 sec maximum

# ■Resistance Measurement (Ω)

•Resistance measurement (22)						
	Desclution	Accuracy	Measuring	Open-loop	Input Protective	
Range Resolution		732 01~04	Current	Voltage	Voltage	
Ω 00	0.1 Ω	0.75%+2	<1mA	<3.4V		
4K Ω	0.001 kΩ		<0.5mA	<1.0V		
0KΩ	0.01 kΩ	0.75%+1	<70µA		600V	
0KΩ	0.1 kΩ		<7μΑ	<0.7V	0000	
4M Ω	0.001 MΩ	2%+1	<0.7µA			
ΩM	0.01 MΩ	5%+2	<70nA			
	00 Ω 4K Ω 0K Ω 0K Ω	00 Ω         0.1 Ω           4K Ω         0.001 kΩ           0K Ω         0.01 kΩ           0K Ω         0.01 kΩ           0K Ω         0.01 kΩ           0K Ω         0.01 kΩ	ange         Resolution $732 \ 01-04$ 00 Ω         0.1 Ω         0.75%+2           4K Ω         0.001 kΩ         0.75%+1           0K Ω         0.1 kΩ         0.75%+1           0K Ω         0.1 kΩ         2%+1	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	

Response time: 1sec maximum for ranges lower than the 400 k $\Omega$  range, 5 sec maximum for the 4  $M\Omega$  range, and 15 sec maximum for the 40  $M\Omega$  range

## ●Continuity Test (··))

Denes	Resolution	Range of operation	Open-loop	Input Protective
Range	Resolution	732 01~04	Voltage	Voltage
400Ω	0.1Ω	The buzzer turns on for resistances lower than $50\pm 20\Omega$ .	<3.4V	600V

Response time: 0.2 sec maximum (for a buzzer response)

#### Diode Test

Dongo	Becelution	Accuracy	Open-loop	Input Protective	
Range Resolution		732 01~04	732 01~04 Voltage		
2V	0.01V	1%+1(for measuring currents smaller than 1.0mA)	<3.4V	600V	
Response time: 1 sec maximum					

## ●Capacitor Test(一)

Range	Resolution		Accuracy	Protection Fuse	
Range	Resolution	732 01/04	732 02	732 03	FIDIECIIDITFUSE
20nF	0.01nF				
200nF	0.1nF		Typically 2% + 5		By means of a 500 mA/250 V
2μF	0.001µF	This function is not available.	(Readings in the the values after 2	20 nF range are	
20µF	0.01µF		has been completed.)		fuse
200µF	0.1µF			-	

Response time: 1sec maximum Optional Accessories

	•Optional Accessories						
	Name	Code	Description				
	Fuse	F 05	500mA/250V				
	ruse	F 02	15A/250V				
	Testing lead	RD 031	A pair of L-shaped red and black plugs				
	Case	B9646GB	Carrying case				
	Case	930 07	Rubber case				

#### • Before using the product, read the instruction manual World Wide Web site at Yokogawa M&C Corporation carefully to ensure proper and safe operation http://www.yokogawa.co.jp/MCC/Welcome\_e.htm YOKOGAWA M&C CORPORATION Kojimachi-Tokyu Bldg. 3F 6-6 Koji-machi, Chiyoda-ku, Tokyo, 102-0083 Japan Represented by: International Sales Dept. Phone: 81-3-3239-0576 Facsimile: 81-3-3239-0585 YOKOGAWA CORPORATION OF AMERICA (U.S.A.) YOKOGAWA EUROPE B. V. (THE NETHERLANDS) YOKOGAWA AMERICA DO SUL S.A. (BRAZIL) YOKOGAWA ENGINEERING ASIA PTE. LTD. (SINGAPORE) YOKOGAWA MEASURING INSTRUMENTS KOREA CORPORATION (KOREA) YOKOGAWA AUSTRALIA PTY. LTD. (AUSTRALIA) YOKOGAWA AUSTRALIA PTY. LTD. (AUSTRALIA) YOKOGAWA BLUE STAR LTD. (INDIA) LTD. YOKOGAWA ELECTRIC (RUSSIAN FEDERATION) Phone: 1-770-253-7000 Facsimile: 1-770-251-2088 Phone: 31-334-64-1611 Phone: 55-11-7295-1433 Phone: 65-783-9537 Phone: 82-2-551-0660 to 0664 Facsimile: 31-334-64-1610 Facsimile: 55-11-7295-1329 Facsimile: 65-786-6650 Facsimile: 82-2-551-0665 Phone: 886-2-2321-1113 Phone: 61-2-9805-0699 Phone: 91-80-227-1513 Phone: 7-095-967-0350 Facsimile: 886-2-2322-5593 Facsimile: 61-2-9888-1844 Facsimile: 91-80-227-4270 Facsimile: 7-502-253-3509 MCK-ES4

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