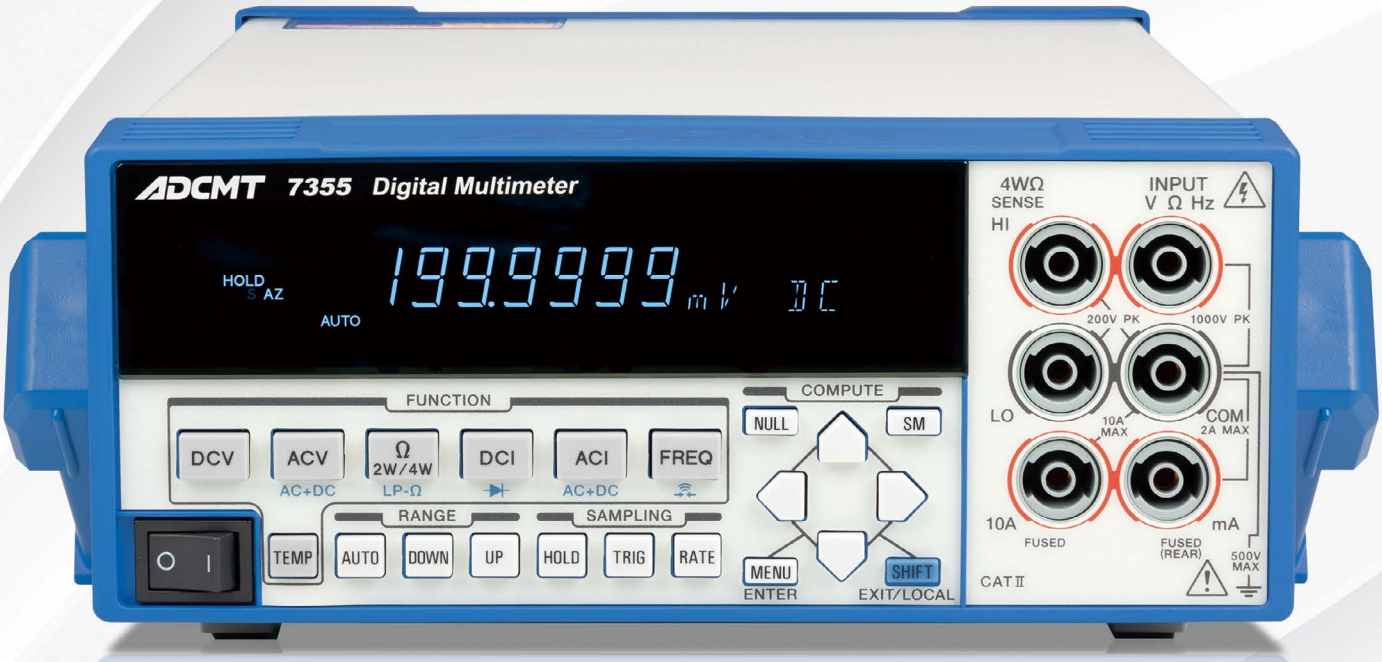
ADCMT®

7355
Digital Multimeter

Low-priced general-purpose 5½-digit DMM equipped with USB and LAN as standard

- Display resolution
  5½-digit display (199999, 7351-compatible function)
  6½-digit display (1999999)
- Eye-friendly VA LCD with large characters
- Variable integration function (200 µs to 2 s)
- 4-wire resistance measurement
- Temperature measurement with Pt100/JPt100
- Various types of interfaces
  USB and LAN as standard
  GPIB, RS232 and comparator output as option

USB | LAN | GPIB (Factory option) | RS232 (Factory option)



6½ Digits Display Max

Variable Integration

Pt TEMP Measurement

https://www.adcmt.com

High-Performance and Cost-Effective Digital Multimeter

The 7355 is a 5½-digit (maximum display: 199999) digital multimeter adopting an integrating type A/D converter. It can also display 6½ digits (maximum display: 1999999) providing high-resolution measurements.
Based on conventional low-cost models, the 7355 offers enhanced functionality and cost-effective performance.
The variable integration function, included for the first time in an ADC low-priced model, allows the integration time to be set arbitrarily, enabling accurate averaged measurements of pulsed currents and voltages. In addition, the 4-wire resistance measurement and 4-wire low-power resistance measurement functions enable more precise low-resistance measurements.
Furthermore, temperature measurement function with a resolution of 0.001 °C using a platinum resistance thermometer is provided.
A variety of combinable calculation functions and interfaces are available to meet the various needs of users, for both benchtop and system use.

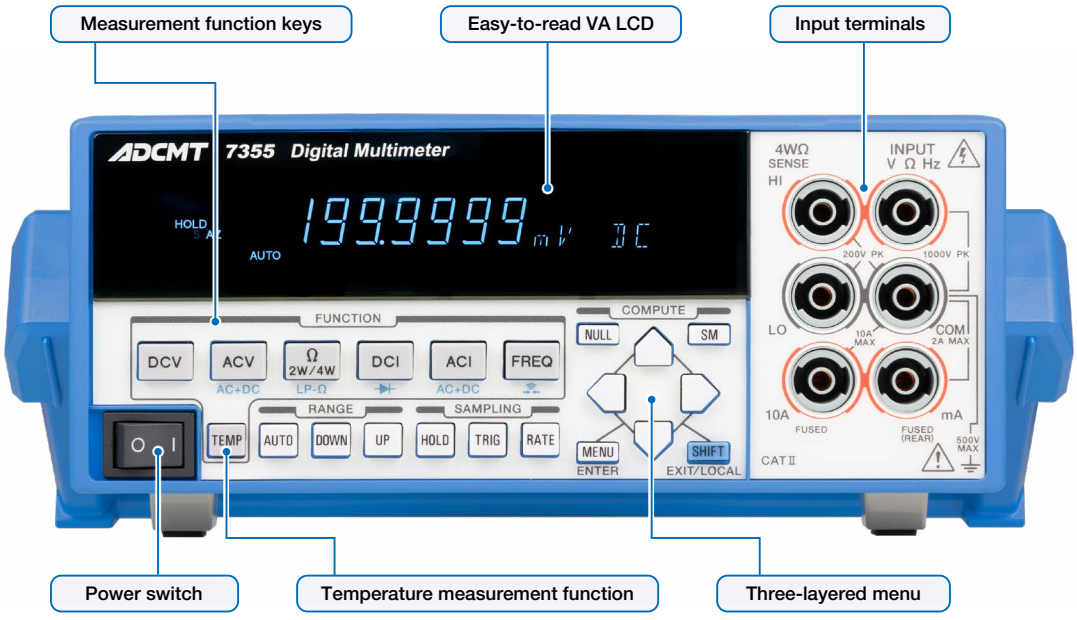
Wide variety of interfaces

USB and LAN are standard interfaces, and GPIB or RS232 can be installed as factory option.
In addition to ADC commands, SCPI commands are supported as standard.

Interface	Standard	Option +01	Option +03
USB	✓	✓	✓
GPIB		✓	
RS232			✓
LAN	✓	✓	✓
Comparator output			✓
External trigger input		✓	✓
Complete output		✓	✓

Temperature measurement with a resolution of 0.001 °C

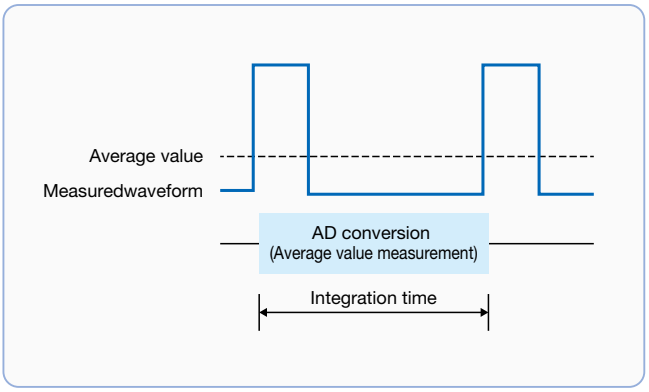
The 7355 is capable of temperature measurement with a resolution of 0.001°C using a platinum resistance thermometer. It is useful in various fields including automotive, home appliance, air-conditioning, energy control, medical and industrial equipment fields.



A Full Range Of Functions Beyond Its Class

Average current measurement [Variable integration function]

The integration time can be set arbitrarily from 200 µs to 2 s, making it easy to measure the average current consumption of cell phones, LCDs, and other devices. As any integration time of the AD converter itself can be set and analog integration is adopted, there are no omissions in waveforms differently from digital integration, resulting in precise average measurement.



Precise resistance measurement with 4-wire resistance measurement

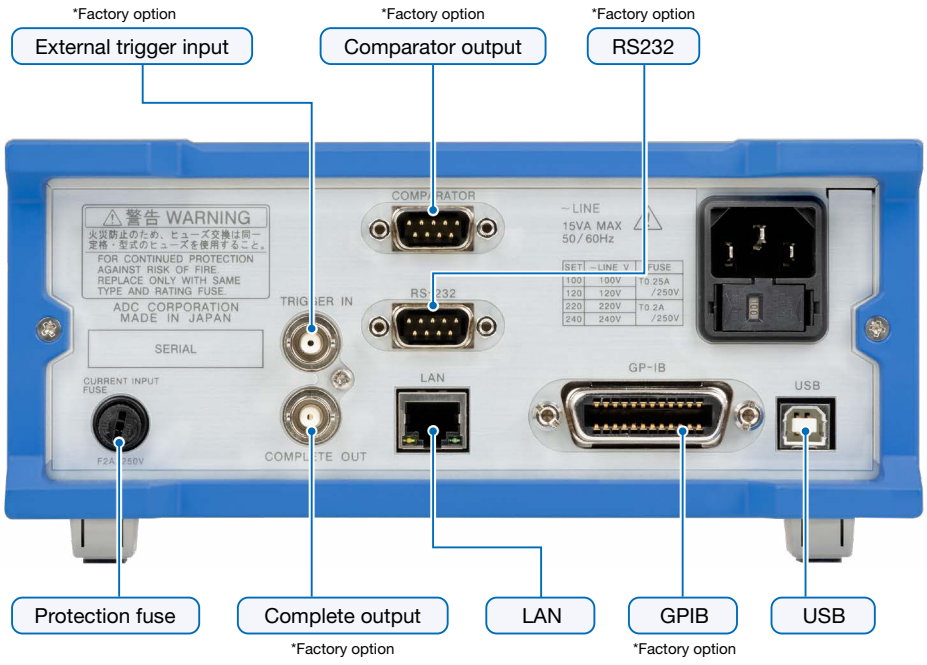
In 2-wire resistance measurement, line resistance of the measurement cable or contact resistance of the connecting section affects the measurement result. On the other hand, 4-wire resistance measurement allows accurate resistance measurement without being affected by the line resistance or contact resistance.
The 7355 offers both 4-wire resistance measurement and 4-wire low-power resistance measurement.

Selectable display resolution of 5½ digits and 6½ digits

The 7355 is capable of 6½-digit display (maximum display: 1999999), enabling high-resolution measurements with a minimum resolution of 100 nV, 100 µΩ, and 100 nA.
In addition, the 7351-compatible mode allows the 7355 to display 5½ digits (maximum display: 199999), making it an easy replacement for the former models.

Comparator output [Option +03]

The output signal of the COMPARATOR terminal of Option +03 (factory option) can be selected between comparator output and digital output in the menu settings.
In particular, the digital signal output can be used to control the opening and closing of external devices, making systemization easier.



7355 Specifications

Unless otherwise specified, the measurement accuracy is guaranteed for one year under the following conditions: temperature of 23±5 °C, relative humidity of 85 % or less (75 % or less in resistance measurement of 20 MΩ or more and low power resistance measurement of 2 MΩ or more).
The specifications are given in the case of 6½-digit display. As for 5½-digit display, multiply the digits error by 1/10. (However, the digit errors of ACV (AC+DC) and ACI (AC+DC) are the same for 6½-digit and 5½-digit displays.)

DC Voltage Measurement (DCV)

Input terminal	Range	Maximum display		Resolution		Input impedance	Measurement accuracy *1 ±(% of reading +digits)			Temperature coefficient ±(ppm of reading +digits)/℃	
		FAST	MED/SLOW1,2	FAST	MED/SLOW1,2		FAST	MED	SLOW1,2	Auto-zero ON	Auto-zero OFF
V-COM	200 mV	199.99	199.9999	10 μV	100 nV	1 GΩ以上	0.012+2	0.012+70	0.012+60	15+8.5	15+20
	2000 mV	1999.9	1999.999	100 μV	1 μV	1 GΩ以上	0.011+2	0.011+40	0.011+20	15+2	15+15
	20 V	19.999	19.99999	1 mV	10 μV	10 MΩ± 1 %	0.015+2	0.015+50	0.015+50	20+2.5	20+15
	200 V	199.99	199.9999	10 mV	100 μV	10 MΩ± 1 %	0.015+2	0.015+40	0.015+30	20+2.5	20+15
	1000 V	1099.9	1099.999	100 mV	1 mV	10 MΩ± 1 %	0.015+2	0.015+40	0.015+30	20+2.5	20+15

*1 When the Auto-zero is ON
When the Auto-zero is OFF, add 20 digits (6½ digits) to the digit error.
"IT > 400 ms" is specified only when the Auto-zero is ON.

■ Additional error depending on integration time setting

Integration time	Measurement accuracy	Description
200 μs ≦ IT < 2 ms	See FAST.	4½-digit display, additional error ± 10 digits
IT = 2 ms		-
2 ms < IT ≦ 15 ms		Convert the digit error to 5½-digit display.
15 ms < IT < 1 PLC		Convert the digit error to 6½-digit display.
1 PLC ≦ IT < 100 ms	See MED.	*2
100 ms ≦ IT ≦ 200 ms	See SLOW1,2.	*2
200 ms < IT ≦ 2 s		Additional error ± 50 digits (for 6½-digit display) *2

*2 For integer multiples of 1 PLC

■ Maximum allowable input voltage

V terminal – COM terminal	1000 V peak
COM terminal – chassis	500 V peak

■ Noise reduction ratio

Integration time	Effective CMRR *3		NMRR
	DC	50/60 Hz ± 0.08 %	50/60 Hz ± 0.08 %
Integer multiples of 1 PLC	130 dB	120 dB	60 dB
Other	130 dB	60 dB	0 dB

*3 Unbalanced impedance of 1 kΩ

AC Voltage Measurement (ACV, ACV (AC+DC))

Measurement method: True RMS measurement, RMS display
Input range: 5% or more of a full scale
Crest factor: 3 : 1 at a full scale (Restricted to the maximum allowable input)
Temperature coefficient: (1/10 of measurement accuracy that includes the additional error)/°C in each range and frequency range)
Response time: Approx. 1 s (Time until the measurement value reaches within 0.1% of the final value in the same range)

■ ACV

Input terminal	Range	Maximum display		Resolution		Input impedance
		FAST	MED/SLOW1,2	FAST	MED/SLOW1,2	
V-COM	200 mV	199.99	199.9999	10 μV	100 nV	1 MΩ± 2 % 140 pF or less
	2000 mV	1999.9	1999.999	100 μV	1 μV	
	20 V	19.999	19.99999	1 mV	10 μV	
	200 V	199.99	199.9999	10 mV	100 μV	
	700 V	749.9	749.999	100 mV	1 mV	

RATE setting	Range	Measurement accuracy *4 ±(% of reading + digits)				
		20 to 45 Hz	45 to 100 Hz	100 to 20 kHz	20 k to 50 kHz	50 k to 100 kHz
FAST	200 mV	0.38+14	0.11+12	0.1+12	0.25+15	0.7+24
	2000 mV	0.38+14	0.11+12	0.1+12	0.2+15	0.6+24
	20 V	0.38+14	0.11+12	0.1+12	0.2+15	0.6+24
	200 V	0.38+14	0.11+12	0.1+12	0.2+15	0.6+24
	700 V	0.38+10	0.11+10	0.1+10	-	-
MED SLOW1,2	200 mV	0.38+1400	0.11+1200	0.1+1000	0.25+1500	0.7+2400
	2000 mV	0.38+1400	0.11+1200	0.1+1000	0.2+1500	0.6+2400
	20 V	0.38+1400	0.11+1200	0.1+1000	0.2+1500	0.6+2400
	200 V	0.38+1400	0.11+1200	0.1+1000	0.2+1500	0.6+2400
	700 V	0.38+1000	0.11+1000	0.1+1000	-	-

*4 For sine wave input

■ Additional error depending on ACV integration time setting

Integration time	Measurement accuracy	Description
200 μs ≦ IT < 2 ms	See FAST.	4½-digit display, additional error ± 10 digits
IT = 2 ms		-
2 ms < IT ≦ 15 ms		Convert the digit error to 5½-digit display.
15 ms < IT < 1 PLC		Convert the digit error to 6½-digit display.
1 PLC ≦ IT ≦ 2 s	See MED/SLOW1,2.	For integer multiples of 1 PLC

■ ACV (AC+DC)

Input terminal	Range	Maximum display		Resolution		Input impedance
		FAST	MED/SLOW1,2	FAST	MED/SLOW1,2	
V-COM	200 mV	199.9	199.99	100 μV	10 μV	1 MΩ± 12 % 140 pF or less
	2000 mV	1999	1999.9	1 mV	100 μV	
	20 V	19.99	19.999	10 mV	1 mV	
	200 V	199.9	199.99	100 mV	10 mV	
	700 V	749	749.9	1V	100 mV	

RATE setting	Range	Measurement accuracy *4 ±(% of reading + digits)				
		20 to 45 Hz	45 to 100 Hz	100 to 20 kHz	20 k to 50 kHz	50 k to 100 kHz
FAST MED SLOW1,2	200 mV	0.38+14	0.11+12	0.1+12	0.25+15	0.7+24
	2000 mV	0.38+14	0.11+12	0.1+12	0.2+15	0.6+24
	20 V	0.38+14	0.11+12	0.1+12	0.2+15	0.6+24
	200 V	0.38+14	0.11+12	0.1+12	0.2+15	0.6+24
	700 V	0.38+10	0.11+10	0.1+10	-	-

■ Additional error depending on ACV (AC+DC) integration time setting

Integration time	Reading error ± (% of reading)		Digit error (Value of measurement accuracy)	Description
	20 to 45 Hz	45 to 100 Hz		
200 μs ≦ IT ≦ 2 ms	3	0.15	× 1	-
2 ms < IT < 1 PLC			× 10 (4½-digit conversion)	-
1 PLC ≦ IT < 100 ms	2	0.015	× 1	For integer multiples of 1 PLC
100 ms ≦ IT ≦ 2 s	-	-		

■ Additional error depending on crest factor (For non-sine wave input)

1 to 2	0.05 % of range
2 to 3	0.15 % of range

■ Maximum allowable input voltage

V terminal – COM terminal	700 V rms, 1000 V peak, 2.2×10^7 V·Hz
COM terminal – chassis	500 V peak

Resistance Measurement

2W Ω /4W Ω resistance measurement

Range	Maximum display		Resolution		Measurement current	Measurement accuracy *5 *6 ±(% of reading +digits)			Temperature coefficient *7 ±(ppm of reading +digits)/℃	
	FAST	MED/SLOW1,2	FAST	MED/SLOW1,2		FAST	MED	SLOW1,2	Auto-zero ON	Auto-zero OFF
200 Ω	199.99	199.9999	10 mΩ	100 μΩ	1 mA	0.02+2	0.02+90	0.02+80	20+10	20+20
2000 Ω	1999.9	1999.999	100 mΩ	1 mΩ	1 mA	0.02+2	0.02+40	0.014+30	15+2.5	15+15
20 kΩ	19.999	19.99999	1 Ω	10 mΩ	100 μA	0.02+2	0.02+40	0.014+30	15+2.5	15+15
200 kΩ	199.99	199.9999	10 Ω	100 mΩ	10 μA	0.02+2	0.02+40	0.02+30	20+2.5	20+15
2000 kΩ	1999.9	1999.999	100 Ω	1 Ω	1 μA	0.03+2	0.03+80	0.03+60	35+20	35+50
20 MΩ	19.999	19.99999	1 kΩ	10 Ω	100 nA	0.2+2	0.2+80	0.2+60	155+20	155+50
200 MΩ	199.99	199.9999	10 kΩ	100 Ω	10 nA	1.5+2	1.5+80	1.5+60	1500+20	1500+50

2W Ω /4W Ω low-power resistance measurement

Range	Maximum display		Resolution		Measurement current	Measurement accuracy *5 *6 ±(% of reading +digits)			Temperature coefficient *7 ±(ppm of reading +digits)/℃	
	FAST	MED/SLOW1,2	FAST	MED/SLOW1,2		FAST	MED	SLOW1,2	Auto-zero ON	Auto-zero OFF
200 Ω	199.99	199.9999	10 mΩ	100 μΩ	1 mA	0.02+2	0.02+90	0.02+80	20+10	20+50
2000 Ω	1999.9	1999.999	100 mΩ	1 mΩ	100 μA	0.03+2	0.03+90	0.03+80	20+10	20+30
20 kΩ	19.999	19.99999	1 Ω	10 mΩ	10 μA	0.03+2	0.03+90	0.03+80	20+10	20+30
200 kΩ	199.99	199.9999	10 Ω	100 mΩ	1 μA	0.03+2	0.03+90	0.03+80	30+10	30+30
2000 kΩ	1999.9	1999.999	100 Ω	1 Ω	100 nA	0.2+2	0.2+120	0.2+100	150+20	150+50
20 MΩ	19.999	19.99999	1 kΩ	10 Ω	10 nA	1.5+5	1.5+120	1.5+100	1500+20	1500+50

*5 For 2W Ω , add the resistance of the measurement cable and the offset error of 0.3 Ω .
*6 When the Auto-zero is ON. When the Auto-zero is OFF, add 20 digits (6½ digits) to the digit error. "IT > 400 ms" is specified only when the Auto-zero is ON.
*7 For 4W Ω , the temperature coefficient is applied with Auto-zero ON.

■ Additional error depending on integration time setting

Integration time	Measurement accuracy	Description
200 μs ≦ IT < 2 ms	See FAST.	4½-digit display, additional error ± 10 digits
IT = 2 ms		-
2 ms < IT ≦ 15 ms		Convert the digit error to 5½-digit display.
15 ms < IT < 1 PLC		Convert the digit error to 6½-digit display.
1 PLC ≦ IT < 100 ms	See MED.	*8
100 ms ≦ IT ≦ 200 ms	See SLOW1,2.	*8
200 ms < IT ≦ 2 s		Additional error ± 50 digits (for 6½-digit display) *8

*8 For integer multiples of 1 PLC

Response time	200 MΩ : 2 s	Time until the measurement value reaches within 0.1% of the final value
	20 MΩ : 0.5 s	
Open-circuit voltage:	7.5 V or less	

■ Maximum allowable input voltage

Ω terminal - COM terminal	1000 V peak
4WΩ HI terminal - 4WΩ LO terminal	200 V peak
4WΩ HI/LO terminal - COM terminal	200 V peak
COM terminal - chassis	500 V peak
4WΩ HI/LO terminal - chassis- chassis	500 V peak

DC Current Measurement (DCI)

Input terminal	Range	Maximum display		Resolution		Resistance between terminals	Measurement accuracy *9 ±(% of reading +digits)			Temperature coefficient ±(ppm of reading +digits)/℃	
		FAST	MED/SLOW1,2	FAST	MED/SLOW1,2		FAST	MED	SLOW1,2	Auto-zero ON	Auto-zero OFF
mA-COM	200 mA	199.99	199.9999	10 μA	100 nA	0.5 Ω or less	0.03+2	0.03+100	0.03+100	40+10	40+20
	2000 mA	1999.9	1999.999	100 μA	1 μA	0.5 Ω or less	0.05+2	0.05+60	0.05+50	50+7	50+15
10A-COM	10 A	10.999	10.99999	1 mA	10 μA	0.06 Ω or less	0.15+2	0.15+70	0.15+60	50+7	50+15

*9 When the Auto-zero is ON. When the Auto-zero is OFF, add 20 digits (6½ digits) to the digit error. "IT > 400 ms" is specified only when the Auto-zero is ON.

■ Additional error depending on integration time setting

Integration time	Measurement accuracy	Description
200 μs ≦ IT < 2 ms	See FAST.	4½-digit display, additional error ± 10 digits
IT = 2 ms		-
2 ms < IT ≦ 15 ms		Convert the digit error to 5½-digit display.
15 ms < IT < 1 PLC		Convert the digit error to 6½-digit display.
1 PLC ≦ IT < 100 ms	See MED.	*10
100 ms ≦ IT ≦ 200 ms	See SLOW1,2.	*10
200 ms < IT ≦ 2 s		Additional error ± 50 digits (for 6½-digit display) *10

*10 For integer multiples of 1 PLC

	Maximum allowable input current	Input protection	Fuse replacement method
mA-COM	2000 mA	2A/250V fast-blow fuse which is compliant with IEC60127 sheet1	To be replaced on the rear panel
10A-COM	10 A	15 A/250 V fast-blow fuse with 10000 A breaking capacity	Contact us to repair

AC Current Measurement (ACI, ACI (AC+DC))

Measurement method: True RMS measurement, RMS display
Input range: 5% or more of a full scale
Crest factor: 3:1 at a full scale (Restricted to the current protection fuse rating)
Temperature coefficient: (1/10 of measurement accuracy that includes the additional error)/°C in each range and frequency range)
Response time: Approx. 1 s (Time until the measurement value reaches within 0.1% of the final value in the same range))

■ ACI

Input terminal	Range	Maximum display		Resolution		Resistance between terminals
		FAST	MED/SLOW1,2	FAST	MED/SLOW1,2	
mA-COM	200 mA	199.99	199.9999	10 μA	100 nA	0.5 Ω or less
	2000 mA	1999.9	1999.999	100 μA	1 μA	0.5 Ω or less
10 A-COM	10 A	10.999	10.99999	1 mA	10 μA	0.06 Ω or less

RATE setting	Range	Measurement accuracy *11 ±(% of reading + digits)		
		20 to 45 Hz	45 to 1 kHz	1 k to 5 kHz
FAST	200 mA	0.4+20	0.3+20	0.3+10
	2000 mA	0.5+20	0.35+10	0.35+20
	10 A	0.5+20	0.35+20	0.7+20
MED SLOW1,2	200 mA	0.4+2000	0.3+2000	0.3+1000
	2000 mA	0.5+2000	0.35+1000	0.35+2000
	10 A	0.5+2000	0.35+2000	0.7+2000

*11 For sine wave input

■ Additional error depending on ACI integration time setting

Integration time	Measurement accuracy	Description
200 μs ≦ IT < 2 ms	See FAST.	4½-digit display, additional error ± 10 digits
IT = 2 ms		-
2 ms < IT ≦ 15 ms		Convert the digit error to 5½-digit display.
15 ms < IT < 1 PLC		Convert the digit error to 6½-digit display.
1 PLC ≦ IT ≦ 2 s	See MED/SLOW1,2.	For integer multiples of 1 PLC

■ ACI (AC+DC)

Input terminal	Range	Maximum display		Resolution		Resistance between terminals
		FAST	MED/SLOW1,2	FAST	MED/SLOW1,2	
mA-COM	200 mA	199.9	199.99	100 μA	10 μA	0.5 Ω or less
	2000 mA	1999	1999.9	1 mA	100 μA	0.5 Ω or less
10 A-COM	10 A	10.99	10.999	10 mA	1 mA	0.06 Ω or less

RATE setting	Range	Measurement accuracy*12 ±(% of reading + digits)		
		20 to 45 Hz	45 to 1 kHz	1 k to 5 kHz
FAST	200 mA	0.4+20	0.3+20	0.3+12
MED	2000 mA	0.5+20	0.35+12	0.35+20
SLOW1,2	10 A	0.5+20	0.35+20	0.7+20

*12 For sine wave input

■ Additional error depending on ACI (AC+DC) integration time setting

Integration time	Reading error ± (% of reading)		Digit error (Value of measurement accuracy)	Description
	20 to 45 Hz	45 to 100 Hz		
200 μs ≦ IT ≦ 2 ms	3	0.15	× 1	-
2 ms < IT < 1 PLC			× 10 (4½-digit conversion)	-
1 PLC ≦ IT < 100 ms	2	0.015	× 1	For integer multiples of 1 PLC
100 ms ≦ IT ≦ 2 s	-	-		

■ Additional error depending on crest factor (For non-sine wave input) ±(% of reading + % of range)

Range	Crest factor	
	1 to 2	2 to 3
200 mA	0+0.05	0.1+0.15
2000 mA	0+0.05	0.1+0.15
10 A	0+0.05	0.03+0.15

■ Maximum allowable input current

	Maximum allowable input current	Input protection	Fuse replacement method
mA - COM	2000 mA	2A/250V fast-blow fuse which is compliant with IEC60127 sheet1	To be replaced on the rear panel
10A - COM	10 A	15 A/250 V fast-blow fuse with 10000 A breaking capacity	Contact us to repair

Frequency Measurement (FREQ)

Measurement method Reciprocal

Measurement frequency range	Measurement accuracy
10 Hz to 300 kHz	0.02 % of reading

A frequency over the above range is displayed but not guaranteed.

Input signal voltage range: 100 mV rms to 700 V rms and 10% of each voltage range or more
(However, the input signal is restricted to the maximum allowable input voltage.)

■ Gate time

RATE setting	Gate time	Measurement frequency range	Measurement period	Maximum display
SLOW	1000 ms	1 Hz to 300 kHz	2.2 s	9999999
MED	100 ms	10 Hz to 300 kHz	220 ms	999999
FAST	10 ms	100 Hz to 300 kHz	22 ms	99999

■ Maximum allowable input voltage

V terminal – COM terminal	700 V rms, 1000 V peak, 2.2×10^7 V·Hz
COM terminal – chassis	500 V peak

Diode Measurement

Range	Maximum display		Resolution		Measurement current	Measurement accuracy*13 ±(% of reading +digits)			Temperature coefficient ±(ppm of reading +digits)/℃	
	FAST	MED/SLOW1,2	FAST	MED/SLOW1,2		FAST	MED	SLOW1,2	Auto-zero ON	Auto-zero OFF
2000 mV	1999.9	1999.999	100 μV	1 μV	1 mA	0.02+2	0.02+40	0.014+30	15+2.5	15+15

*13 Add the offset error "(measurement cable resistance + 0.3 Ω) × 1 mA."
The specifications other than the above are the same as those of the 2000 Ω range in 2W Ω measurement.

Continuity Measurement

Range	Maximum display		Resolution		Measurement current	Measurement accuracy ±(% of reading +digits)			Temperature coefficient ±(ppm of reading +digits)/℃	
	FAST	MED/SLOW1,2	FAST	MED/SLOW1,2		FAST	MED	SLOW1,2	Auto-zero ON	Auto-zero OFF
2000 Ω	1999.9	1999.999	100 mΩ	1 mΩ	1 mA	0.02+2	0.02+40	0.014+30	15+2.5	15+15

Continuity judgment value: 1 to1000 Ω
The specifications other than the above are the same as those of the 2000 Ω range in 2WΩ measurement.

Temperature Measurement

Resistance thermometer	Pt100	JPt100
Standard	JIS C1604-1997	JIS C1604-1981
Measurement range	-200 to +850 ℃	-200 to +649 ℃
Maximum display	850000	649000
Resolution	0.001 ℃	
Accuracy *14	± (0.02 % of reading + 0.15 ℃)	
Temperature coefficient	± (21 ppm of reading + 0.011 ℃) /℃	
Measurement current	1 mA	
Linearization	Digital calculation	
Wire connection	2W, 3W or 4W	
Allowable wire resistance	10 Ω or lower (except 2W)	
Measurement unit	℃, ℉ or K	

*14 4W, RATE: SLOW1 or 2, not including the measurement probe accuracy
For 3W, add 0.1 ℃ to the offset error.

Measurement Time

RATE setting	Integration time	Measurement speed (measurement time)			
		DCV, DCI, 2WΩ, LP-2WΩ, TEMP (PT-2W)		ACV, ACI, Continuity, Diode	ACV (AC+DC), ACI (AC+DC)	4WΩ, LP-4WΩ, TEMP(PT-3W), TEMP(PT-4W)
		Auto-zero ON	Auto-zero OFF		
FAST	2 ms	69.4 times/s (14.4 ms)	149.2 times/s (6.7 ms)	30.3 times/s (33 ms)	56.1 times/s (17.8 ms)
MED	1 PLC	19.8 times/s (50.4 ms)	40 times/s (25 ms)	20 times/s (50 ms)	18.5 times/s (53.8 ms)
SLOW1	100 ms	4.7 times/s (210.4 ms)	9.5 times/s (105 ms)	4.7 times/s (210 ms)	4.6 times/s (214 ms)
SLOW2	200 ms	2.4 times/s (410.4 ms)	4.8 times/s (205 ms)	2.4 times/s (410 ms)	2.4 times/s (414 ms)

Condition: Auto-range OFF, calculation OFF, display OFF

■ Maximum measurement speed and its conditions

Measurement speed	250 times/s
Target function	DCV, DCI, 2W Ω , LP-2W Ω
Integration time	200 μs
Sampling interval	4 ms
Other	*15

*15 Condition: Auto-range OFF, Auto-zero OFF

■ Integration time (IT) and sampling interval (SI)

Integration time (IT)	
Setting range	Resolution
200 μs to 2 s	100 μs
0.02 PLC to 100 PLC	0.01 PLC
Sampling interval (SI)	
Setting range	
4 ms to 3600 s	

■ Integration time and display digits

Function / Integration time (IT)	DCV/DCI, 2WΩ /LP-2WΩ, 4WΩ /LP-4WΩ, ACV/ACI, Diode/continuity	ACV (AC+DC), ACI (AC+DC)
200 μs ≦ (IT) ≦ 2 ms	4½-digit display	3½ 桁表示
2 ms < (IT) ≦ 15 ms	5½-digit display	4½ 桁表示
15 ms < (IT) ≦ 2 s	5½-digit or 6½-digit display (Depends on digit selection)	4½ 桁表示

Interface Specifications

Interface	Specification	
Remote control	Remote command	Compliance with the ADC and SCPI command formats 7351-compatible mode and 34401A-comptible mode
	Output format	ASCII or binary (IEEE-754 64-bit floating point
USB interface (standard)	Standard	Compliance with USB2.0 Full Speed
	Connector	Type B
	Class	ADC instruments USB driver, USBTMC, USBCDC
GPIB interface (Option +01)	Standard	Compliance with IEEE488.2
	Connector	24-pin Anphenol
	Interface function	SH1, AH1, T5, L4, SR1, RL1, PP0, DC1, DT1, C0, E2
	Addressing	31 kinds of talker/listener addresses can be specified from the front panel.
RS232 interface (Option +03)	Standard	EIA-232
	Connector	D-Sub9 pin
	Baud rate	19200, 9600, 4800, 2400, 1200, 600, 300
	Parity	Even number (EVEN), odd number (ODD), or none
	Number of data bits	7 bits or 8 bits
	Number of stop bits	1 bit or 2 bits
	Echo	ON, OFF
LAN interface (standard)	Standard	Compliance with IEEEE802.3
	Data transmission	10BASE-T、100BASE-TX
	Connector	RJ-45
Comparator output (Option+03)	Output signal	TTL Output: PASS/FAIL Relay output: PASS/Hi/Lo (PASS/FAIL output can be set individually)
a.Optical semiconductor relay contact	Connector	D-Sub9 pin
	Allowable contact voltage (for break)	DC 30 V
	Allowable contact current	DC 120 mA
	Withstand voltage between contact and GND	30 V
	Contact operating time	Approx. 1 ms or less
b.TTL output	Output level	TTL, selecting the positive or negative logic
	Maximum allowable input voltage	12 V peak
External trigger signal (Option +01, +03)	Connector	BNC
	Signal level	TTL, falling edge or rising edge detection
	Pulse width	1 μs or more
Complete signal output (Option +01, +03)	Connector	BNC
	Signal level	TTL, negative pulse
	Sink current	20 mA or less
	Pulse width	Approx. 5 μ s, 100 μ s or 1 ms

*No options can be added after purchase.

Calculation Functions

NULL calculation — Display value (NULL) = Measurement value - NULL constant

Smoothing calculation — Display value (SM) = Moving average of specified number of times

Comparator calculation — Display (HIGH) ← HIGH setting value < Measurement value
Display (LOW) ← Measurement value < LOW setting value
Display (GO) ← LOW setting value ≦ Measurement value ≦ HIGH setting value

Scaling calculation — Display (SCL) = (Measurement value - B)/A × C
A, B, and C are constants. (Setting values)

MAX and MIN calculation — Display value (MAX) = Maximum measurement value after the calculation starts
Display value (MIN) = Minimum measurement value after the calculation starts
Display value (AVE) = Arithmetic mean after the calculation starts
Measurement value count = Measurement count after the calculation starts

dB and dBm calculation — dB display = 20 log (Measurement value/D)
dBm display value = 10 log ((Measurement value)^2/D)/10^{-3}
Constant D (setting value)

Statistical calculation
Number of samples: Display value (SAMPLE)
= Number of measurement values in the specified range of the measurement memory
Maximum value: Display value (MAX)
= Maximum measurement value in the specified range of the measurement memory
Minimum value: Display value (MIN)
= Minimum measurement value in the specified range of the measurement memory
Average value: Display value (AVE)
= Average value in the specified range of the measurement memory
Standard deviation: Display value (SIGMA)
= Standard deviation in the specified range of the measurement memory
Dispersion: Display value (P-P)
= ((Maximum measurement value) - (Minimum measurement value)) in the specified range of the measurement memory

General Specifications

Operating environment: Temperature: 0° C to +50° C
Relative humidity: 85% or less no condensation
(75% or less no condensation for the resistance measurement range of 20 MΩ or higher or the low-power resistance measurement range of 20 MΩ or higher)

Storage environment: Temperature: -25° C to +70° C
Relative humidity: 85% or less, no condensation

Warm-up time: 60 minutes or more
Display: Decimal 7 digits, 7-segment VA LCD
Range switching: Automatic and manual
Input method: Floating

Maximum allowable applied voltage

				V Ω Hz
			4WΩHI	200 Vpeak
		4WΩLO	200 Vpeak	200 Vpeak
	COM	200 Vpeak	200 Vpeak	1000 Vpeak
Chassis	500 Vpeak	500 Vpeak	500 Vpeak	1000 Vpeak

Measurement method: Integration
Overload display: OL
Trigger function: External trigger signal, panel key, remote command
Memory: Measurement data memory: Up to 20,000 data
Condition setting memory: 4 (USER0 to USER3)

Power supply: AC power supply 100V/120V/220V/240V (User selectable)

Option number	Standard	OPT. 32	OPT. 42	OPT. 44
Power voltage	100 V	120 V	220 V	240 V

Specify the option when ordering.
Use a power cable and a fuse that are compliant with the safety standard when changing the power supply voltage.

Line frequency: 50 Hz/60 Hz
Power consumption: 15 VA or less
Dimensions: Approx. 212 (W) x 88 (H) x 340 (D) mm
Mass: 4.5 kg or less
Safety: Compliant with IEC61010-1 Ed.3 Measurement CAT Ⅱ
EMC: EN61326-1 class A

Supplied accessories/Optional accessories/Options

■ Supplied accessories

Name	Model	Quantity	Remarks
Power cable	A01402	1	*16
Input cable (Red, Black)	CC010001	1 each	
Power Fuse (For 100 V/120 V)	DFT-AAR25A-1	1	*17
Power Fuse (For 220 V/240 V)	DFT-AAR2A-1		
Overcurrent protection fuse	DFS-AN2A-1	1	
Quick Manual	E7355 (Q)	1	

*16 The power cable can be changed by specifying the option at the time of purchase.
*17 Either of fuses is included depending on the power supply option.

■ Optional accessories

Name	Model	Remarks
Input cable	CC010001	Supplied accessory
	A01001	Shielded cable
	A01006	For 4-wire resistance measurement
Alligator clip adapter	CC015001	
Internal temperature detecting sensor	1104-010	Jpt100, probe type
Sheath-type platinum resistance bulb	1104-001	JPt100, sheath outer diameter: ϕ 3.2 mm
	1104-002	JPt100, sheath outer diameter: ϕ 1.0 mm
JIS rack mount set	A02263	
	A02264	Twin
EIA rack mount set	A02463	
	A02464	Twin
Panel mount set	A02039	
	A02040	Twin

■ Options

Name	Model	Remarks
GPIB interface	7355+01	Factory option
RS232 option	7355+03	

- Please read through the operation manual carefully before using the product.
- All specifications are subject to change without notice.

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