Specifiche DMM portatile HP 974A

DMM portatile

Specifiche

Corrente CC, corrente CA (40 Hz — 1 kHz), da 5% a 100% dell'intervallo

Intervallo	Risoluzione	Precisione corrente CC	Precisione corrente CA	Resistenza in ingresso	Ingresso massimo
500 µA	10 nA	± (0.3% + 2)	± (1% + 20)	< 1050 Ω	0.5 A (con fusibile)
50 mA	1 µA			< 12 Ω	
500 mA	10 µA			< 2.5 Ω	
10 A	1 mA	± (0.7% + 2)		< 0.05 Ω	15 A (con fusibile)

Resistenza

Intervallo	Risoluzione	Precisione	Corrente di prova	Tensione massima a circuito aperto
500 Ω	10 mΩ	± (0.06% + 2) [1]	< 800 µA	< 5.5 V
5.0 kΩ	100 mΩ	± (0.06% + 2)	< 80 µA	< 2.2 V
50 kΩ	1Ω		< 15 µA	
500 kΩ	10 Ω			
5.0 MΩ	100 Ω	± (0.5% + 1)	< 1.5 µA	
50 MΩ	1 kΩ	± (1.0% + 2)	< 150 nA	

[1] Dopo la regolazione dello zero dei conduttori di ingresso. Intervallo di regolazione dello zero fino a 0.99 Ω.
Tempo di risposta: 500 Ω — 500 kΩ: < 2 secondi; 5 MΩ — 50 MΩ: < 10 secondi.

Continuità

Corrente di misura: massimo 0.8 mA
Resistenza indicata: 0 Ω — 499.99 Ω
Allarme: tono per segnali di ingresso < 100 Ω ± 50 Ω

Tensione a circuito aperto: < 5.5 V di picco
Protezione all'ingresso: 500 V rms (onda sinusoidale)
Risoluzione: 10 mΩ (tempo di risposta <100 msec)

Specifiche DMM portatile Keysight U1252B

Table 7-1 DC accuracy ± (% of reading + number of LSD) (continued)

Function	Range [a]	Resolution	Test Current or Burden Voltage	Accuracy
Resistance [6][7]	500.00 Ω [3]	0.01 Ω	1.04 mA	0.05 + 10
	5.0000 kΩ [3]	0.0001 kΩ	416 µA	0.05 + 5
	50.000 kΩ	0.001 kΩ	41.2 µA	0.05 + 5
	500.00 kΩ	0.01 kΩ	4.12 µA	0.05 + 5
	5.0000 MΩ	0.0001 MΩ	375 nA // 10 MΩ	0.15 + 5
	50.000 MΩ [4]	0.001 MΩ	187 nA // 10 MΩ	1.00 + 5
	500.00 MΩ [4]	0.01 MΩ	187 nA // 10 MΩ	3.00+5 < 200 M 8.00+5 > 200 M
	500.00 nS [5]	0.01 nS	187 nA	1+10

Notes for resistance specifications:

a 2% over-range on all ranges except DC 1000 V range.
3 The accuracy of 500 Ω and 5 kΩ is specified after applying the Null function, which is used to subtract the test lead resistance and the thermal effect.
4 For the range of 50 MΩ/500 MΩ, the relative humidity is specified for < 60%.
5 The accuracy is specified for < 50 nS, after applying the Null function with open test lead.
6 These specifications are defined for 2-wire ohms using Math Null. Without Math Null, add 0.2 Ω additional error.
7 Maximum open voltage: <+ 4.2 V.

Specifiche DMM da banco HP 34401A

■ Specifiche DC

Caratteristiche di precisione ± (% della lettura + % del range) [1]

Funzione	Range [3]	Corrente di prova o tensione di carico totale	24 ore [2] 23°C ± 1°C	90 giorni 23°C ± 5°C	1 anno 23°C ± 5°C	Coefficiente di temperatura 0°C – 18°C 28°C – 55°C
Tensione DC	100.0000 mV		0.0030 + 0.0030	0.0040 + 0.0035	0.0050 + 0.0035	0.0005 + 0.0005
	1.000000 V		0.0020 + 0.0006	0.0030 + 0.0007	0.0040 + 0.0007	0.0005 + 0.0001
	10.00000 V		0.0015 + 0.0004	0.0030 + 0.0005	0.0035 + 0.0005	0.0005 + 0.0001
	100.0000 V		0.0020 + 0.0006	0.0035 + 0.0006	0.0045 + 0.0006	0.0005 + 0.0001
	1000.000 V		0.0020 + 0.0006	0.0035 + 0.0010	0.0045 + 0.0010	0.0005 + 0.0001
Resistenza [4]	100.0000 Ω	1 mA	0.0030 + 0.0030	0.008 + 0.004	0.010 + 0.004	0.0006 + 0.0005
	1.000000 kΩ	1 mA	0.0020 + 0.0005	0.008 + 0.001	0.010 + 0.001	0.0006 + 0.0001
	10.00000 kΩ	100 µA	0.0020 + 0.0005	0.008 + 0.001	0.010 + 0.001	0.0006 + 0.0001
	100.0000 kΩ	10 µA	0.0020 + 0.0005	0.008 + 0.001	0.010 + 0.001	0.0006 + 0.0001
	1.000000 MΩ	5 µA	0.002 + 0.001	0.008 + 0.001	0.010 + 0.001	0.0010 + 0.0002
	10.00000 MΩ	500 nA	0.015 + 0.001	0.020 + 0.001	0.040 + 0.001	0.0030 + 0.0004
	100.0000 MΩ	500 nA // 10 MΩ	0.300 + 0.010	0.800 + 0.010	0.800 + 0.010	0.1500 + 0.0002
Corrente DC	10.00000 mA	≤ 0.1 V	0.005 + 0.010	0.030 + 0.020	0.050 + 0.020	0.002 + 0.0020
	100.0000 mA	< 0.6 V	0.01 + 0.004	0.030 + 0.005	0.050 + 0.005	0.002 + 0.0005
	1.000000 A	< 1 V	0.05 + 0.005	0.080 + 0.010	0.100 + 0.010	0.005 + 0.0010
	3.000000 A	< 2 V	0.10 + 0.020	0.120 + 0.020	0.120 + 0.020	0.005 + 0.0020
Continuità	1000.0 Ω	1 mA	0.002 + 0.010	0.008 + 0.020	0.010 + 0.020	0.001 + 0.002
Test diodi	1.0000 V	1 mA	0.002 + 0.010	0.008 + 0.020	0.010 + 0.020	0.001 + 0.002
Rapporto DC:DC	100 mV a 1000 V		(Precisione in ingresso) + (precisione segnale di riferimento) Precisione in ingresso = precisione del segnale di ingresso HI-LO. Precisione segnale di riferimento = precisione del segnale di ingresso di riferimento HI-LO.			

Precisione di trasferimento (tipica)

$$\frac{\text{(percentuale errore di range in 24 ore)}}{2}$$

Condizioni:
Entro 10 minuti e ± 0.5°C.
Entro ±10% del valore iniziale.
Dopo 2 ore di riscaldamento.
Range fisso tra 10% e 100% del fondo scala.
Con risoluzione di 6½ cifre, lento (100 PLC)
Misure eseguite con procedure metrologiche riconosciute.

Specifiche LCR Meter Agilent 4263 B

4263B

- Test Cable Lengths

  0 m, 1 m, 2 m, 4 m (@ 100 Hz, 120 Hz, 1 kHz)
  0 m, 1 m, 2 m (@ 10 kHz, 20 kHz)
  0 m, 1 m (@ 100 kHz)

- Measurement Time Mode

  Short, Medium, and Long

- Ranging

  Auto and Hold (manual)

- Averaging

  1 to 256

- Trigger Mode

  Internal, Manual, External, and Bus

- Trigger Delay Time

  0 to 9.999 seconds in 0.001 seconds steps

Measurement Range

Parameter	Measurement Range
Z, R, X	1 mΩ to 100 MΩ
Y, G, B	10 nS to 1000 S
C	1 pF to 1 F
L	10 nH to 100 kH

Parameter	Measurement Range
D	0.0001 to 9.9999
Q	0.1 to 9999.9
∠ (θ)	−180 ° to 180 °
Rdc	1 mΩ to 100 MΩ

Measurement Accuracy

The following conditions must be met:

1. Warm up time: ≥ 15 min
2. OPEN and SHORT corrections have been performed.
3. Test Signal Level V_{osc} = 50 mV, 100 mV, 250 mV, 500 mV, 1 V
   (Measurement accuracy at V_{osc} other than above listed points is typical data.)
4. Ambient temperature: 23 ± 5 °C

Within the temperature (T) range of 0 to 45 °C, multiply the basic accuracy by the following temperature induced error,

8 °C ≤ T < 18 °C, or 28 °C < T ≤ 38 °C : × 2
0 °C ≤ T < 8 °C, or 38 °C < T ≤ 45 °C : x 4

■ |Z|, |Y|, L, C, R, X, G, B, and Rdc accuracy (A_e [%])

□ When $|Z_x| > 100\ \Omega$

$$A_e = A + B \times C \times |Z_x| / Z_s + D / |Z_x| + |Z_x| / E$$

□ When $|Z_x|$ or DCR $\leq 100\ \Omega$

$$A_e = A + B \times C \times Z_s / |Z_x| + D / |Z_x| + |Z_x| / E$$

where, $|Z_x|$ is the measured |Z| value.
When measuring Y, L, C, R, X, G, E, or Rdc, convert the value to the impedance value using Figure 8-1.

Z_s is the setup range value and is given in Table 8-1. A, B, and C are given in Table 8-1.
D is given in Table 8-2.
E is given in Table 8-3.

L, C, X, B accuracies apply when D_x (measured D value) ≤ 0.1.
When $D_x > 0.1$, multiply A_e by $\sqrt{1 + D_x^2}$.

R, G accuracies apply when Q_x (measured Q value) ≤ 0.1.
When $Q_x > 0.1$, multiply A_e by $\sqrt{1 + Q_x^2}$.

The accuracy of G above applies when in G-B mode.

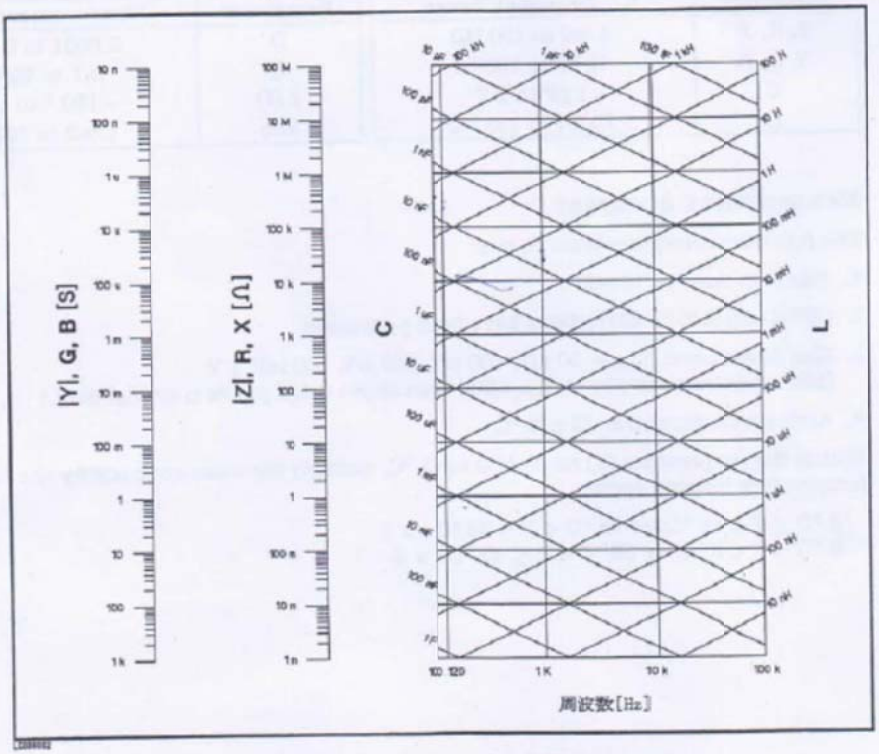

Figure 8-1. Conversion Diagram

Table 8-1. Measurement Accuracy Parameter: A, B, and C

$\|Z_x\|$	Z_s	A [%] (Short / Medium, Long) B [%] (Short / Medium, Long)			
		Test Signal Frequency			
		DC	100/120 Hz	1 kHz	10 kHz
1 MΩ ≤ $\|Z_x\|$ ≤ 100 MΩ	1 MΩ	0.85 / 0.85 0.075 / 0.025	0.48 / 0.15 0.075 / 0.025[1]	0.13 / 0.1 0.04 / 0.02	0.48 / 0.48 0.04[2] / 0.02[2]
100 kΩ ≤ $\|Z_x\|$ < 1 MΩ	100 kΩ	0.85 / 0.85 0.055 / 0.02	0.48 / 0.15 0.055 / 0.02[3]	0.13 / 0.095 0.02 / 0.01	0.36 / 0.36 0.02[2] / 0.015[2]
10 kΩ ≤ $\|Z_x\|$ < 100 kΩ	10 kΩ			0.11 / 0.09 0.02 / 0.01	0.16 / 0.16 0.02 / 0.015
1 kΩ ≤ $\|Z_x\|$ < 10 kΩ	1 kΩ				
100 Ω < $\|Z_x\|$ ≤ 1 kΩ	100 Ω				
10 Ω < $\|Z_x\|$ ≤ 100 Ω	100 Ω				
1 Ω < $\|Z_x\|$ ≤ 10 Ω	10 Ω		0.5 / 0.17 0.055 / 0.02	0.13 / 0.12 0.02 / 0.01	0.2 / 0.2 0.02 / 0.015
100 mΩ < $\|Z_x\|$ ≤ 1 Ω	1 Ω	0.85 / 0.85 0.09 / 0.02	0.5 / 0.4 0.09 / 0.02	0.4 / 0.4 0.03 / 0.01	0.4 / 0.4 0.03 / 0.015
1 mΩ ≤ $\|Z_x\|$ ≤ 100 mΩ	100 mΩ	0.85 / 0.85 0.29 / 0.1	0.5 / 0.4 0.29 / 0.1	0.4 / 0.4 0.095 / 0.03	0.4 / 0.4 0.075 / 0.03

1 When the DC Bias is set to ON, 0.075 / 0.045

2 Multiply the number by the following error, when the cable length is 1 m or 2m.
1 m : ×2.5
2 m : ×4

3 When the DC bias is set to ON, 0.055 / 0.040

Table 8-1. Measurement Accuracy Parameter: A, B, and C (continued)

$\|Z_x\|$	Z_s	A [%] (Short / Medium, Long) B [%] (Short / Medium, Long) Test Signal Frequency		C
		20 kHz	100 kHz	
1 MΩ ≤ $\|Z_x\|$ ≤ 100 MΩ	1 MΩ	1.9 / 1.9 0.12[1] / 0.06[1]	Not Specified	1 (@ 1 V, DC) 5 (@ 500 mV) 10 (@ 250 mV) 25 (@ 100 mV) 50 (@ 50 mV)
100 kΩ ≤ $\|Z_x\|$ < 1 MΩ	100 kΩ	1.4 / 1.4 0.05[1] / 0.03[1]	1.15[2] / 1.15[2] 0.11[2] / 0.1[2]	1 (@ 1 V, DC) 2 (@ 500 mV) 4 (@ 250 mV) 8 (@ 100 mV) 15 (@ 50 mV)
10 kΩ ≤ $\|Z_x\|$ < 100 kΩ	10 kΩ	0.8 / 0.8 0.05 / 0.03		
1 kΩ ≤ $\|Z_x\|$ < 10 kΩ	1 kΩ	0.7 / 0.7 0.05 / 0.03	1.12 / 1.12 0.11 / 0.1	1 (@ 1 V, DC) 1 (@ 500 mV) 2 (@ 250 mV) 5 (@ 100 mV) 10 (@ 50 mV)
100 Ω < $\|Z_x\|$ < 1 kΩ	100 Ω	0.7 / 0.7 0.05 / 0.03	1.12 / 1.12 0.11 / 0.1	
10 Ω < $\|Z_x\|$ ≤ 100 Ω	100 Ω	0.5 / 0.5 0.05 / 0.03	0.83 / 0.83 0.11 / 0.1	
1 Ω < $\|Z_x\|$ ≤ 10 Ω	10 Ω	0.6 / 0.6 0.05 / 0.03	0.97 / 0.97 0.11 / 0.1	
100 mΩ < $\|Z_x\|$ ≤ 1 Ω	1 Ω	0.6 / 0.6 0.05 / 0.03	0.97 / 0.97 0.11 / 0.1	
1 mΩ ≤ $\|Z_x\|$ ≤ 100 mΩ	100 mΩ	0.6 / 0.6 0.14 / 0.06	0.97 / 0.97 0.14 / 0.1	1 (@ 1 V, DC) 2 (@ 500 mV)

1 Multiply the number by the following error when the cable length is 1 m or 2m.
1 m : ×2.5
2 m : ×4

2 Use 10 kΩ as the Zs value, even if the $\|Z_x\|$ value is 100 kΩ ≤ $\|Z_x\|$ < 1 MΩ.

Table 8-2. Measurement Accuracy Parameter: D

Cable Length	D Test Signal Frequency				
	DC, 100/120 Hz	1 kHz	10 kHz	20 kHz	100 kHz
0 m	0.002 Ω	0.0045 Ω	0.025 Ω	0.05 Ω	0.25 Ω
1 m	0.01 Ω	0.0165 Ω	0.075 Ω	0.15 Ω	0.75 Ω
2 m	0.018 Ω	0.0285 Ω	0.125 Ω	0.25 Ω	—
4 m	0.034 Ω	0.0525 Ω	—	—	—

Table 8-3. Measurement Accuracy Parameter: E

E Test Signal Frequency				
DC, 100/120 Hz	1 kHz	10 kHz	20 kHz	100 kHz
2.8×10^{8} Ω	2.8×10^{7} Ω	2.8×10^{6} Ω	1.4×10^{6} Ω	2.8×10^{5} Ω

■ D accuracy (D_e [%])

$$De = \pm\frac{A_e}{100}$$

Accuracy applies when D_x (measured D value) ≤ 0.1.

When $D_x > 0.1$, multiply D_e by $(1+D_x)$.

■ Q accuracy (Q_e [%])

$$Q_e = \pm\frac{Q_x^2 \times D_e}{1 \mp Q_x \times D_e}$$

where, Q_x is the measured Q value.
D_e is the D accuracy.

Accuracy applies when $Q_x \times D_e < 0.1$

■ $\angle(\theta)$ accuracy (θ_e [%])

$$\theta_e = \frac{180}{\pi} \times A_e$$

■ G accuracy (G_e [%])

$$G_e = B_x \times D_e$$

Where, D_e is the D accuracy [%].
B_x is given as

$$B_x = 2\pi f C_x = \frac{1}{2\pi f L_x}$$

Where, C_x is the measured C value [F].
L_x is the measured L value [H].
D_e is the D accuracy.
f is the test signal frequency [Hz].

G accuracy described in this paragraph applies, when the Cp-G and Lp-G combinations and D_x (measured D value) ≤ 1.

■ Rs Accuracy (RS_e [%])

$$RS_e = X_x \times D_e$$

Where, D_e is the D accuracy [%].
X_x is given as,

$$X_x = 2\pi f L_x = \frac{1}{2\pi f C_x}$$

Where, C_x is the measured C value [F].
L_x is the measured L value [H].
D_e is the D accuracy.
f is the measurement frequency [Hz].

Accuracy applies when D_x (measured D value) ≤ 0.1.

■ Rp Accuracy (RP_e [%])

$$RP_e = \pm\frac{RP_x \times D_e}{D_x \mp D_e}$$

Where, RP_x is the measured Rp [Ω],
D_e is the D accuracy [%].
D_x is the measured D.

Accuracy applies when D_x (measured D value) ≤ 0.1.

Specifiche LCR Meter Keyight U1733C

U1731C/U1732C/U1733C Electrical Specifications

Accuracy is given as ± (% of reading + counts of least significant digit) at 23 °C ± 5 °C, with relative humidity less than 80%. Please refer to the User Guide about the measuring mode specified for each range of L/C/R, series or parallel mode. Measurements performed at the test socket and necessary Open and Short corrections must prior be done. The accuracy is verified by design and specified type tests.

Impedance/Resistance

		Accuracy = AZ + Offset					
Range	Resolution	U1731C/U1732C/U1733C			U1732C/U1733C		U1733C
		100 Hz	120 Hz	1 kHz	10 kHz	100 kHz	DCR[1]
2 Ω[1]	0.0001 Ω	0.7% + 50	0.7% + 50	0.7% + 50	0.7% + 50	1.0% + 50	0.7% + 50
20 Ω[1]	0.001 Ω	0.7% + 8	0.7% + 8	0.7% + 8	0.7% + 8	0.7% + 8	0.7% + 8
200 Ω[1]	0.01 Ω	0.2% + 3	0.2% + 3	0.2% + 3	0.2% + 3	0.5% + 5	0.2% + 3
2000 Ω	0.1 Ω	0.2% + 3	0.2% + 3	0.2% + 3	0.2% + 3	0.5% + 5	0.2% + 3
20 kΩ	0.001 kΩ	0.2% + 3	0.2% + 3	0.2% + 3	0.2% + 3	0.5% + 5	0.2% + 3
200 kΩ	0.01 kΩ	0.5% + 5	0.5% + 5	0.5% + 5	0.5% + 5	0.7% + 8	0.5% + 5
2000 kΩ	0.1 kΩ	0.5% + 5	0.5% + 5	0.5% + 5	0.7% + 5	NA	0.5% + 5
20 MΩ	0.001 MΩ	2.0% + 8	2.0% + 8	2.0% + 8	5.0% + 8	NA	2.0% + 8
200 MΩ	0.01 MΩ	6.0% + 80	6.0% + 80	6.0% + 80	NA	NA	6.0% + 80

Notes:
1. The accuracy for ranges 2 Ω to 200 Ω is specified after Null function which is used to subtract the resistance of test leads and the contact resistance
2. For ranges of 20 MΩ and 200 MΩ, the R.H is specified for < 60%
3. Resistance is specified to Q < 10 and D > 0.1, otherwise the accuracy is (AZ+Offset) x $\sqrt{(1+Q^2)}$
4. Equivalence Series Resistance (ESR) measurement is determined by impedance measurement and range. The maximum display is up to 199.99 kΩ and accuracy is (AZ+Offset) x $\sqrt{(1+Q^2)}$

Capacitance[3]

		Accuracy = AC + Offset				
Range	Resolution	U1731C/U1732C/U1733C			U1732C/U1733C	U1733C
		100 Hz	120 Hz	1 kHz	10 kHz	100 kHz
20 mF	0.001 mF	0.5% + 8	0.5% + 8	NA	NA	NA
2000 µF	0.1 µF	0.5% + 5	0.5% + 5	0.5% + 8	NA	NA
200 µF	0.01 µF	0.3% + 3	0.3% + 3	0.5% + 5	0.5% + 8	NA
20 µF	0.001 µF	0.2% + 3	0.2% + 3	0.2% + 3	0.5% + 5	5.0% + 10
2000 nF	0.1 nF	0.2% + 3	0.2% + 3	0.2% + 3	0.2% + 3	0.7% + 10
200 nF	0.01 nF	0.2% + 3	0.2% + 3	0.2% + 3	0.5% + 3	0.7% + 10
20 nF	0.001 nF	0.5% + 5	0.5% + 5	0.2% + 3	0.5% + 3	0.7% + 10
2000 pF[1]	0.1 pF	0.5% + 10	0.5% + 10	0.5% + 5	0.5% + 3	2.0% + 10
200 pF[1]	0.01 pF	NA	NA	0.5% + 10	0.8% + 10	2.0% + 10
20 pF[1]	0.001 pF	NA	NA	NA	1.0% + 20	2.5% + 10

Notes:
1. The accuracy for ranges 20 pF – 2000 pF is specified after Null function which is used to subtract the stray capacitances of test leads.
2. The accuracy for the ceramic capacitor will be influenced depending on the dielectric constant (K) of the material used to make the ceramic capacitor. For related influence factors, please refer to the Component dependency factors section in the Impedance Measurement Handbook downloadable for free at http://www.keysight.com/find/lcrmeters
3. Capacitance is specified to Q > 0.1 and D < 10, otherwise the accuracy is (AZ+Offset) x $\sqrt{(1+D^2)}$

U1731C/U1732C/U1733C Electrical Specifications

Inductance[2]						
				Accuracy = AL + Offset		
Range	Resolution		U1731C/U1732C/U1733C		U1732C/U1733C	U1733C
		100 Hz	120 Hz	1 kHz	10 kHz	100 kHz
20 µH[1]	0.001 µH	NA	NA	NA	1.0% + 5	2.5% + 20
200 µH[1]	0.01 µH	NA	NA	1.0% + 5	0.7% + 3	2.5% + 20
2000 µH[1]	0.1 µH	0.7% + 10	0.7% + 10	0.5% + 3	0.5% + 3	0.8% + 20
20 mH	0.001 mH	0.5% + 3	0.5% + 3	0.2% + 3	0.3% + 3	0.8% + 10
200 mH	0.01 mH	0.5% + 3	0.5% + 3	0.2% + 3	0.2% + 3	1.0% + 10
2000 mH	0.1 mH	0.2% + 3	0.2% + 3	0.2% + 3	0.5% + 5	1.0% + 10
20 H	0.001 H	0.2% + 3	0.2% + 3	0.5% + 5	1.0% + 5	2.0% + 10
200 H	0.01 H	0.7% + 5	0.7% + 5	1.0% + 5	2.0% + 8	NA
2000 H	0.1 H	1.0% + 5	1.0% + 5	2.0% + 8	NA	NA

Notes:
1. The accuracy for ranges 20 uH – 2000 uH is specified after Null function which is used to subtract the inductances of test leads.
2. Inductance is specified to Q > 0.1 and D < 10, otherwise the accuracy is (AL+Offset) x $\sqrt{(1+D^2)}$

Phase Angle of Impedance				
Range	Resolution	Accuracy (θe)	Condition	
–180° ~180°	0.1°/1°	(AZ + Offset/Zx) x180/π	D < 1 or Q > 1	
Example of calculation shown below is referring to Impedance function with Range of 2000 Ω at frequency of 100 Hz				
Impedance	Zx	AZ	Offset	θe
1999.9 Ω	19999	0.2%	3	± 0.12°
199.9 Ω	1999	0.2%	3	± 0.20°
19.9 Ω	199	0.2%	3	± 0.98°
1.9 Ω	19	0.2%	3	± 9.16°

Notes:
1. Specifications are applicable to all models (U1731C, U1732C, and U1733C) unless otherwise specified.
2. The "AZ" and Offset are the accuracy specification for impedance measurement.
3. The "π" is approximately 3.14159.
4. The Zx is the display count of the reading.

Dissipation/Quality Factor				
Function	Range	Accuracy (De)	Condition	
Z	0.001~999	AZ + Offset/Zx x 100% + 3	D < 1 or Q > 1	
L	0.001~999	AL + Offset/Lx x 100% + 3	D < 1 or Q > 1	
C	0.001~999	AC + Offset/Cx x 100% + 3	D < 1 or Q > 1	
Example of calculation shown below is referring to Capacitance function with Range of 200 uF at frequency of 100 Hz.				
Capacitance	Cx	AC	Offset	De
88.88 µF	8888	0.3%	3	0.334% + 3

Notes:
1. Specifications are applicable to all models (U1731C, U1732C, and U1733C) unless otherwise specified.
2. The "AZ, AL, AC" and Offset are the accuracy specifications for Impedance, Inductance, and Capacitance measurement, respectively.
3. The Zx, Lx, and Cx are the display count of the reading. For example, the Cx is 8888 as if the capacitance is 88.88 µF for the range of 200 µF.
4. The Quality Factor is the reciprocal of Dissipation Factor.