

LCR meters

ELC-133A/132A/131D/3133A

Features

■ ELC-133A/132A

Dual display, 20,000/1,000 counts
0.7% Basic Accuracy
Auto/Manual Ranging
Measurement Parameters: L.C.R.D. Q. θ (θ : ELC-133A only)
Test Frequency: 100Hz/120Hz/1K/10KHz selectable (ELC-133A)
120Hz/1KHz selectable (ELC-132A)
Parallel/Serial test mode
Relative mode
Self calibration
Static recording (Max/Min/Avg)
Tolerance mode (1%, 5%, 10%, 20%) (20%, ELC-133A only)
External DC power operation
Auto power off
Low battery indicator
Overmodeled case, integrated holster
Optical RS-232 interface
Backlit (ELC-133A only)
Measurement Ranges: L: 2mH to 1,000H; C: 2,000pF to 10mF
R: 20 Ω to 10M Ω Q: .000 to 999 Auto D: .000 to 999 Auto; θ : $\pm 90^\circ$

■ ELC-131D

10,000 Counts for LCR Display, 1,000 Counts for D/Q Display
Measurement Parameters: L.C.R.D & Q
0.7% Basic Accuracy for Capacitance and Inductance Measurement
Auto/Manual Ranging
Inductance 1mH to 10000H, Capacitance 1000pF to 10mF,
Resistance 10 Ω to 10M Ω , Q: .000 to 999 Auto; D: .000 to 999 Auto
Test Frequency 1kHz / 120Hz Selectable
External DC Power Operation
Parallel and Series Mode
Relative Mode, Self Calibration
Static Recording (Max/Min/Avg)
Unique Tolerance Mode (1%, 5%, 10%)
Auto Protective Mode Check
Auto Power Off



CE ELC-3133A



CE ELC-133A/132A



CE ELC-131D

■ ELC-3133A(Bench LCR)

Dual display, 20,000/1,000 counts
Measurement Parameters: L. C. R. D. θ & Q
Auto/Manual Ranging
0.3% Basic Accuracy
Test Frequency: 100Hz/120Hz/1K/10KHz
Parallel/Serial test mode
Data Logging (max, min, avg)
Tolerance mode (1%, 5%, 10%, 20%)
Optical RS-232 interface
Data Processing Software for Windows(optional)
TW-01 SMD Tweezers(Optional)

Ordering Information

ELC-133A/132A/131D Standard Accessories:

Manual,
Test Leads (TL-23)
Alkaline 9V Battery

Optional Accessories:

EA-55 AC 220V, 12V/50mA Adaptor
EA-112 AC 120V, 12V/50mA Adaptor
EH-80G Grey Protective Holster
EC-170 Soft Carrying Case
EC-230 Square Soft Carrying Case(ELC-131D)
CP-09 Communication Package (Disk + RS-232 Cable)(ELC-133A/132A)
TW-01 SMD Tweezers (ELC-133A/132A)

ELC-3133A Standard Accessories:

Manual (CD-ROM)
30A-25002-1/2 Test alligator clips
with BNC (Pair)
AC power cord

Optional Accessories:

CP-09 RS232 package for optical cable
and software in a CD-ROM
TW-02 SMD Tweezers (ELC-3133A)

Specifications	ELC-3133A	ELC-133A	ELC-132A	ELC-131D
Ranging Mode	Auto & Manual Ranging	Auto & Manual Ranging	Auto & Manual Ranging	Auto & Manual Ranging
Test Frequency	100/120/ 1K/ 10KHz	100/ 120/ 1K/ 10KHz	120/ 1KHz	120/ 1KHz
Resistance				
Range	20 Ω ~10M Ω	20 Ω ~10M Ω	20 Ω ~10M Ω	10 Ω , 100 Ω , 1k Ω , 10k Ω , 100k Ω , 1M Ω , 10M Ω
Accuracy	100/ 120/ 1KHz: $\pm(0.3\%rdg+2dgt)$ 10KHz: $\pm(0.6\%rdg+5dgt)$	100/ 120/ 1KHz: $\pm(0.5\%rdg+3dgt)$ 10KHz: $\pm(1.5\%rdg+5dgt)$	120/ 1KHz: $\pm(0.5\%rdg+3dgt)$	120/ 1KHz: 100k Ω ~1k Ω $\pm(0.5\%+3dgt)$ 120/ 1KHz: 0.001 Ω ~0.001M Ω
Resolution	0.001 Ω ~0.001M Ω	0.001 Ω ~0.001M Ω	0.001 Ω ~0.001M Ω	0.001 Ω ~0.001M Ω
Capacitance				
Range	200pF~10mF	200pF~10mF	2000pF~10mF	10mF, 1000 μ F, 100 μ F, 10 μ F, 1000nF, 100nF, 10nF, 1000pF
Accuracy	100/ 120/ 1KHz: Cx: $\pm(0.4\%rdg+3dgt)$, DF<0.5 DF: $\pm(0.4\%rdg+100/Cx+5dgt)$, DF<0.5 10KHz: Cx: $\pm(1.0\%rdg+5dgt)$, DF<0.5 DF: $\pm(1.0\%rdg+100/Cx+6dgt)$, DF<0.5 0.01pF~0.01mF	100/ 120/ 1KHz: Cx: $\pm(0.7\%rdg+3dgt)$, DF<0.5 DF: $\pm(0.7\%rdg+100/Cx+5dgt)$, DF<0.5 10KHz: Cx: $\pm(1.5\%rdg+5dgt)$, DF<0.5 DF: $\pm(1.5\%rdg+100/Cx+6dgt)$, DF<0.5 0.01pF~0.01mF	120/ 1KHz: Cx: $\pm(0.7\%rdg+3dgt)$, DF<0.5 DF: $\pm(0.7\%rdg+100/Cx+5dgt)$, DF<0.5	120Hz: Cx: $\pm(0.7\%+3dgt)$, DF<0.5 DF: $\pm(0.7\%rdg+100/Cx+5dgt)$, DF<0.5 1kHz: Cx: $\pm(0.7\%+3dgt)$, DF<0.5 DF: $\pm(0.7\%rdg+100/Cx+5dgt)$, DF<0.5 0.01mF~0.1pF
Resolution	0.01pF~0.01mF	0.01pF~0.01mF	0.1pF~0.01mF	
Inductance				
Range	2000 μ H~1000H	2000 μ H~1000H	2000 μ H~1000H	10000H, 1000H, 100H, 10H, 1H, 100mH, 10mH, 1mH
Accuracy	100/ 120/ 1KHz: Lx: $\pm(0.7\%rdg+3dgt)$, DF<0.5 DF: $\pm(0.7\%rdg+100/Lx+5dgt)$, DF<0.5 10KHz: Lx: $\pm(1.5\%rdg+5dgt)$, DF<0.5 DF: $\pm(1.5\%rdg+100/Lx+6dgt)$, DF<0.5 0.1 μ H~0.1H	100/ 120/ 1KHz: Lx: $\pm(0.7\%rdg+3dgt)$, DF<0.5 DF: $\pm(0.7\%rdg+100/Lx+5dgt)$, DF<0.5 10KHz: Lx: $\pm(1.5\%rdg+5dgt)$, DF<0.5 DF: $\pm(1.5\%rdg+100/Lx+6dgt)$, DF<0.5 0.1 μ H~0.1H	120/ 1KHz: Lx: $\pm(0.7\%rdg+3dgt)$, DF<0.5 DF: $\pm(1.2\%rdg+100/Lx+5dgt)$, DF<0.5	120Hz: Lx: $\pm(0.7\%+Lx/10000)\%+5dgt$, DF<0.5 DF: $\pm(1.2\%+100/Lx+5d)$, DF<0.5 1kHz: Lx: $\pm(0.7\%+Lx/10000)\%+5dgt$, DF<0.5 DF: $\pm(1.2\%+100/Lx+5d)$, DF<0.5
Resolution	0.1 μ H~0.1H	0.1 μ H~0.1H	0.1 μ H~0.1H	1H~0.1 μ H
Dissipation factor	.000~999 Auto	.000~999 Auto	.000~999 Auto	.000~999 Auto
Quality factor	.000~999 Auto	.000~999 Auto	.000~999 Auto	.000~999 Auto
θ Measurement	$\pm 90^\circ$	$\pm 90^\circ$		
Tolerance mode	1%, 5%, 10%, 20%	1%, 5%, 10%, 20%	1%, 5%, 10%	1%, 5%, 10%
RS-232 interface	standard	standard	standard	
Dimensions (LxWxH)	211 x 260x71mm	182 x 85 x 40mm	182 x 85 x 40mm	192 x 90 x 37 mm
Weight	1.6kgs	0.3kgs	0.3kgs	0.39kgs

All specifications are subject to be changed by ESCORT without notice.