



## **ET1255 5½ and ET1240 4½ Benchtop Digital Multimeter**



ET124X / ET125X is a full-featured, its 3.5-inch large-screen has clear displays of reading, rich content, and a good result of display. It is mains-powered driving which makes it highly reliable. Its comprehensive features, full-range overload protection and unique design make it the first choice for electricians and university laboratories.

In addition, ET124X / ET125X are equipped with the calibration function which allows the user to calibrate according to actual needs and is simple and convenient.

### **Basic features**

- 3.5-inch large-screen display with rich content, clear display of reading, and a good result of display.
- Dual parameter display: it can display two parameters of the same input signal (for example, with the AC voltage measurements, it can display simultaneously AC voltage and AC frequency value).
- Measurement speed points: FAST (6 times / second) → MID (4 times / sec) → SLOW (1 times / sec).
- Duty cycle measurement function
- Square wave output function
- Manual / automatic range setting function
- Communication interfaces: USB Device, RS232
- Support SCPI protocol and provide programming file
- AC and DC voltage, DC current, two-wire / four-wire resistance measurement.
- Cycle and frequency measurement, frequency of up to 20MHz.
- Capacitance measurement.
- Provide automatic trigger, external trigger, and single trigger measurements. (External trigger optional for the ET1240 and ET1241 models).
- Measurement capabilities for current up to 10A and voltage up to 1000V DC.
- Keypad lock function and system setup; languages, buzzer, screen brightness and so on can be configured according to various needs.
- Simple external calibration function
- Variety of mathematical functions: statistics (maximum, minimum), relative measurement, dB, dBm.
- On-off, diodes, reading hold, data hold / reading, key tone, trigger measurement and so on.

### **1. General technical specifications**

Power supply voltage: 220V AC±10%, 110V AC ±10%, 45-65Hz.

Working environment: 0~40°C, relative humidity < 80%.

Storage environment: -10~50°C, relative humidity < 80%.

Display: 3.5-inch, 320 \* 480 resolution, 16 M colour TFT LCD.

Dimensions: 265 mm \* 105 mm \* 305 mm.(width \* height \* depth).

Weight: 2.3kg.

Model		ET1240	ET1241A	ET1255
Display screen		3.5" TFT LCD (resolution of 320*480)		
Number of display digits		4 1/2	4 1/2	5 1/2
Signal terminal		Front end		
Fastest measuring speed		7 readings/s		6 readings/s
Function	No.	Uncertainty, $\pm$ (% of reading + least significant digit )		
DCV	Uncertainty	0.05+ 3	0.03+6	0.015+ 3
	Measurement range	10 uV~1000 V	1 uV~1000 V	1 uV~1000 V
	Maximum resolution	10uV	10uV	1uV
ACV	Uncertainty	0.8+ 80	0.5+40	0.2+ 100
	Measurement range	10 uV~750 V	10 uV~750 V	1 uV~750 V
	Maximum resolution	10uV	10uV	1uV
	Frequency range	40Hz ~ 1kHz	40Hz ~ 20kHz	40Hz ~ 100kHz
DCI	Uncertainty	0.35 +10	0.15+15	0.05 +10
	Measurement range	0.01 uA ~ 10 A	0.01 uA ~ 10 A	0.001 uA ~ 10 A
	Maximum resolution	0.01uA	0.01uA	0.001uA
ACI	Uncertainty	0.8+80	0.75+20	0.3+400
	Measurement range	0.01 uA ~ 10 A	0.01 uA ~ 10 A	0.001 uA ~ 10 A
	Maximum resolution	0.01uA	0.01uA	0.001uA
	Frequency range	40Hz ~ 1kHz	40Hz ~20kHz	40 Hz ~ 5kHz
Resistance	Uncertainty	0.1+ 20	0.1+5	0.02+ 6
	Measurement range	0.01 $\Omega$ ~20M $\Omega$	0.01 $\Omega$ ~20M $\Omega$	0.001 $\Omega$ ~20M $\Omega$
	Maximum resolution	0.01 $\Omega$	0.01 $\Omega$	0.001 $\Omega$
Frequency/cycle	Uncertainty	0.2+10	0.2+10	0.1+3
	Measurement range	0.01 Hz ~20 MHz	0.01 Hz ~20 MHz	0.001 Hz ~20 MHz

	Maximum resolution	0.01Hz	0.01Hz	0.001Hz
Capacitance	Uncertainty	7+ 30	6+15	5+5
	Measurement range	1 pF ~ 10 mF	1 pF ~ 10 mF	1 pF ~ 10 mF
	Maximum resolution	1 11pF	0 1pF	1 1 pF
Mathematical functions:		Relative measurement, max/min, dB, dBm, reading hold		
Data storage/reading		Yes		
Interfaces		USB device standard, RS232 optional	USB Device, RS232	
Trigger measurement		Yes		
Square-wave output		Yes		
Fast measurement		Optional configuration	Yes	
Resistance 4-line measurement		Yes		
External trigger measurement		None		Yes
AC+DC measurement				Yes
Calibration		Yes		
On-off/diode		Yes		
Limit test function		Yes		

**Standard accessories:**

A set of meter probes, one double-end three-core power cord, one optical disc (standard configuration for ET3255 only), 2 spare power fuses, user's manual

**Optional accessories:**

RS232 serial port line, USB cable

**General technical specifications**

Display: 3.5" LCD display

Maximum display: 22000 (4 1/2 digit) or 220000 (5 1/2 digit) automatic polarity display and unit display

Range selection: Automatic/manual

Prompt of over-range: "OL" displayed on the display screen

Measurement test: ET-3255: 6 time/s (fast), 4times/s (medium), 1 time/s (slow)

ET-3240 and ET3241: 7 time/s (fast), 4times/s (medium), 2 times/s (slow)

Power voltage: AC 220V±10%, 50HZ

Operating environment: (0-40°C), relative humidity <80%

Storage environment: -10-50°C, relative humidity <80%

Dimensions: 265Mm×105mm×305mm (W×H×D)

Weight: 2.3Kg