ET3255 / ET3256 / ET3257 / ET3258

ET3255 Series Benchtop Digital Multimeter



OVERVIEW

The ET3255 series is a full-function, stable true-RMS benchtop digital multimeter with dual display. Built on an STM32 chip with an external dual-integration ADC for accurate measurement and stable performance, it has a 3.5-inch 320×480 high-resolution TFT display with clear, rich readings. Mains powered with full-function, full-range overload protection, it is an essential instrument for electricians, electronics engineers and university laboratories.

FEATURES

- 5⅚-digit resolution, maximum display 660000; basic accuracy 0.01 %
- DC current up to 12 A, DC voltage up to 1100 V
- Period and frequency measurement up to 20 MHz
- Data hold, data storage and data recall
- True RMS AC voltage and current measurement, bandwidth up to 100 kHz
- AC+DC measurement, duty cycle measurement, continuity and diode measurement
- Dual display: two parameters of the same input signal at the same time (e.g. AC voltage value and AC frequency)
- 12 basic measurement functions: AC/DC voltage, AC/DC current, 2-wire/4-wire resistance, period, frequency, diode, continuity, limit test, duty cycle
- Math functions: upper/lower limit comparison, statistics (max/min/average), reciprocal, relative, dB, dBm, %, MX+B
- Square-wave output; capacitance measurement up to 10 mF
- Trigger modes: automatic, single and external
- Temperature measurement: 10 thermocouple types (K/N/R/S/T/B/E/J/WRe325/WRe526) and 4 RTD types (PT100/PT50/Cu100/Cu50)
- Measurement speeds: fast, medium, slow
- System settings: language (Chinese or English), buzzer, screen brightness and interface style adjustable
- 3.5-inch TFT display (320×480), adjustable screen brightness
- Interfaces: USB Device, RS232, SCPI protocol supported

SPECIFICATIONS

Item	ET3255	ET3256	ET3257	ET3258
Reading display	220000 (5½)	220000 (5½)	550000 (5 4/5)	660000 (5⅚)
Display speed	Fast / Medium / Slow			
DC voltage	Range 1000 V · best resolution 1 µV · uncertainty ±(0.015 % + 3)		Range 1100 V · best resolution 1 µV · uncertainty ±(0.01 % + 3)	
DC current range	10 A	12 A		
DC current	Best resolution 1 nA · uncertainty ±(0.05 % + 10)		Best resolution 1 nA · uncertainty ±(0.03 % + 10)	
AC voltage range	750 V	800 V		
AC voltage	Frequency range — · best resolution 1 µV · uncertainty ±(0.2 % + 100)	Frequency range 20 Hz – 100 kHz · best resolution 1 µV · uncertainty ±(0.2 % + 100)	Frequency range 20 Hz – 100 kHz · best resolution 1 µV · uncertainty ±(0.1 % + 100)	
AC current range	10 A	12 A		
AC current	Frequency range 20 Hz – 10 kHz · best resolution 1 nA · uncertainty ±(0.2 % + 100)		Frequency range 20 Hz – 10 kHz · best resolution 1 nA · uncertainty ±(0.1 % + 100)	
Resistance range	200 MΩ		1 GΩ	
Resistance	Best resolution 1 mΩ · uncertainty ±(0.015 % + 3)	Best resolution 1 mΩ · uncertainty ±(0.01 % + 3)		
Capacitance	Range 10 mF · best resolution 1 pF · uncertainty ±(1 % + 5)			
Frequency	Range 20 MHz · best resolution 0.0001 Hz · uncertainty ±(0.005 % + 3)			
Power supply	220 V AC ±10 % or 110 V AC ±10 %, 45 – 65 Hz			
Operating environment	0 – 40 °C, relative humidity < 80 %			
Storage	−10 – 50 °C, relative humidity < 80 %			
Display	3.5″ TFT LCD, 480 × 320, 16M colours			
Size & weight	265 × 105 × 305 mm (W × H × D) · 2.3 kg			

OTHER FUNCTIONS

- **Temperature:** 10 thermocouple types R/S/B/K/N/E/J/T/WRe325/WRe526; 4 RTD types Pt100, Pt10, Cu50, Cu100
- **Math:** max, min, upper/lower limit comparison, statistics, reciprocal, relative, dB, dBm, duty cycle, %, MX+B
- **Trigger:** automatic, single, external
- **User-defined sensors:** not supported on ET3255; supported on ET3256 / ET3257 / ET3258 (user-set curves downloaded via USB, up to 20 types)
- **Graphical display:** not supported on ET3255; bar graph, trend chart and histogram on the other three models
- Data hold, data storage, data recall
- **Square-wave output:** 1 Hz – 100 kHz, amplitude 3 V
- **Cold-junction compensation:** built-in temperature sensor, automatic and manual compensation

- **Duty cycle:** 5.0 % – 95.0 %
- **Continuity:** buzzer sounds below the threshold; threshold resistance adjustable 0 – 2 kΩ, default 30 Ω
- **Diode:** 0 – 2 V
- Limit test: supported · AC+DC measurement: supported · Resistance: 2-wire and 4-wire
- **Standard interfaces:** USB Device, RS232

ACCESSORIES

- **Standard:** three-core power cord × 1, test lead pair × 1, spare fuse
- **Optional:** GPIB cable (32P01) · rack mount kit (32P02) · RS232 serial cable (32P04) · USB data cable (32P05)

For quotations, options and lead time, contact Kate Liu — enquiries are answered personally, typically within one working day.