

NB61T

4½ Digit, Dual Display Multimeter

The NB61T is a high speed, high accuracy, true RMS Multimeter that meets the measurement needs of Voltage-Current-Resistance and Frequency. Its outstanding performances, such as high reading rates, and AC/DC Voltage/Current measurement accuracy provide an ideal cost-effective solution to user.



Features

- ▶ Wide measurement capabilities like
- ▶ DCV / ACV, DCA / ACA, Frequency, Resistance, diode, triode, continuity tester etc.
- ▶ Auto Ranging selection
- ▶ A Dual Liquid crystal, Display that allows two properties of an input signal to be displayed at the same time.
- ▶ True RMS AC Voltage and current measurements
- ▶ Frequency measurement to greater than 300 KHz
- ▶ 10 uV sensitivity in volts DC
- ▶ Decibels with variable impedance measurement capability
- ▶ A compare mode (COMP) to determine, if a measurement is within, above or below a designated range.
- ▶ Slow and fast selectable count resolution
- ▶ Function modifier to perform REL, dBm, HOLD, MN MX and COMP Function
- ▶ Built in self-tests with closed-case calibration (no internal calibration required)

Technical Specifications :

DC Voltage

Range	Resolution	Accuracy
300mV	10uV	
3 V	100uV	
30 V	1mV	±0.03% + 3 Digit
300 V	10 mV	
1000 V	100 mV	

Input Impedance

1000 MΩ at 300 mV and 3V 10MΩ at other ranges.

Normal mode Rejection Ratio (NMR)

≥ 60 dB (at 50Hz or 60Hz)

Common Mode Rejection Ratio (CMR)

≥ 120dB (at 50 Hz or 60Hz)

Maximum Input

1000V peak

True RMS AC Voltage, AC-Coupled

Reading Rates

Rate	Readings per Second
Slow (S)	3
Fast (F)	5-7

AC Voltage (True RMS)

Range	Resolution	Accuracy				
		20~50Hz	50Hz ~ 10KHz	10 ~ 20 KHz	20 ~ 30 KHz	30 ~ 50 KHz
300 mV	10 uV	±2% +30 Digit		±1% + 80 Digit	±5% +80 Digit	±10% + 150 Digit
3 V	100 uV		±0.5 % + 30 Digit			
30 V	1 mV	±3% + 30 Digit		±1% + 50 Digit	±5% + 50 Digit	±10% + 50 Digit
300 V	10 mV					
750 V	100 mV		±1% + 30 Digit			

Remark : Accuracy specifications apply to the range from 10% to 100%

Input Impedance

1MΩ || 0.1μF

Maximum Crest Factor

3.0

Common Mode Rejection Ratio

> 120 dB at 50 Hz or 60 Hz (1kW unbalanced resistance)

Maximum Input

750 V rms, 1000 V peak

DC Current

Range	Resolution	Accuracy	Input Impedance
300 mA	10 uA	±0.1%+3 Digit	1Ω
10A	1 mA	±1.5%+3 Digit	0.01 Ω

True RMS AC Voltage, AC-Coupled

Range	Resolution	Accuracy				
		20 ~ 50 Hz	50 Hz ~2 KHz	2 ~ 10 KHz	10 ~ 20 KHz	20 ~ 30 KHz
300 mA	10uA	±2% + 30 Digit	±0.5% + 30 Digit		±1% +80 Digit	±5% + 50 Digit
10A	1mA		± 1.5 % + 30 Digit	±3% + 30 Digit		

Maximum Input : 300 mA Protected with a 500 mA, 250 V fast blow fuse and 10 A for 30 sec maximum, Protected with a 11 A, 250 V blow fuse.

Technical Specifications :

Resistance (OHMS)

Range	Resolution	Accuracy	Open Circuit Voltage	Short Circuit Current (approx)
300 W	10 mW	± 0.05% + 3 Digit	2.5 V	approx 1 mA
3 KW	100 mW			" 250 uA
30 KW	1W			" 25 uA
300 KW	10 W			" 2.5 uA
3 MW	100 W	± 0.1% + 3 Digit		" 0.25 uA
30 MW	1KW	± 0.5% +3 Digit		

Maximum Input Voltage

250 V DC/AC on all ranges

Test Current

Approximate 1 mA when measuring forward bias junction.

Frequency Range

10 Hz to 300 KHz

Applicable Function

AC V

Diode Test / Continuity

Maximum Test Voltage
≤ 2V

Continuous Resistance

≤ 150 W

General

Dimension (mm.) : 220 W x 245 D x 82 H
Weight (approx) : 2 Kg.
Power consumption : 5 VA
Power supply : 230V, 50 Hz

Frequency

Range	Resolution	Accuracy
300 Hz	0.01 Hz	± 0.05% + 2 Digit
3 KHz	0.1 Hz	
30 KHz	1 Hz	
300 KHz	10 Hz	

Accessories

Test Probes : 1 Pair
Mains cord : 1 No.

Sensitivity of AC Voltage

Frequency	Level (Sine Wave)
10 Hz ~ 30 KHz	> 30 mV
10 Hz ~ 300 KHz	> 300 mV

Environmental

Operating Temperature : 5°C to 40°C
Storage Temperature : -25°C to 50°C
Relative Humidity : ≤ 90% at 5°C to 28°C (non-condensing)
≤ 80% at 28°C to 40°C