



# AT 828/827

## Smart Touch

### HANDHELD LCR DIGITAL BRIDGE

CHINESE/ENGLISH  
OPERATION

90 (W) \* 190 (H) \* 31 (D)  
UNIT: mm

Weight: 400g

High capacity lithium battery power supply

Test frequency 50Hz~100kHz

The AT82X series handheld bridge is a newly designed portable instrument by Amber Instruments, which adds DCR function, and is controlled by a high-performance 32-bit ARM microprocessor. Ultra low power design and high-density SMD assembly process, true color TFT LCD display screen, and dual control of keyboard and touch screen. Free from the limitations of the workbench, providing convenience for you to move LCR measurements. Equipped with lithium battery power supply and USB communication. The Chinese and English operation interface can be quickly switched.

The standard data collection software of the instrument provides strong support for data analysis! It is currently the highest configuration for handheld LCR digital bridges! The AT82X series handheld bridge has a measurement frequency of up to 100kHz, a constant 100  $\Omega$  source internal resistance, and a measurement accuracy of up to 0.2%. It combines the superior performance of a portable watch and a desktop instrument!



Power Supply: Input: 100-240V, 50/60Hz,  
0.35A, Output: 5V 3A DC

MODEL	AT828	AT827
Frequency	50Hz, 100Hz, 120Hz, 1kHz, 2kHz, 10kHz, 50kHz & 100kHz	50Hz, 100Hz, 120Hz, 1kHz, 2kHz, 10kHz,
Parameters	C-D, C-Q, C-R, L-D, L-Q, L-R, L-Rdc, R-Q, R-X, R-Rdc, Rdc, Z-D, Z-Q, Z- $\theta$ r, Z- $\theta$ d, DCR	
Monitor Parameters	Off, automatic, loss D, quality factor Q, phase $\theta$ r. Phase $\theta$ °, reactance X, ESR	
Accuracy	0.2%	
Range	8 range testing. Range automatic and locked.	
Display Range	<b>AT828</b> L: 0.001 $\mu$ H-999.9H C: 0.01pF - 999.9mF R,X,Z,Rdc: 0.0001 $\Omega$ - 99.99M $\Omega$ D:0.0001-9.999 Q:0.0001~999.9 <b>AT827</b> L: 0.01 $\mu$ H-999.9H C: 0.01pF - 999.9mF R,Z: 0.0001 $\Omega$ - 99.99M $\Omega$ D:0.0001-9.999 Q:0.0001~999.9	
Signal level	0.3V, 0.7V & 1.0Vrms , Accuracy:10%	
Test Speed	Fast 10t/s, Slow 2.5t/s	
Max reading	Main parameter: 49999 ; Secondary parameter: 49999	
Source Resistance	100 $\Omega$	
Comparator	SEQ/ABS/PER	
Calibration	Open circuit and short circuit calibration	
Equivalent method	Series and parallel connection	
Interface	USB -HID , USB TypeC	
Battery parameters	8.4V, Li, 1400mAh Rechargeable Battery	
Charging time	Single continuous charging time: maximum 200Min	
Series and parallel connection	Brightness 30% $\geq$ 14 hours; Brightness 50% $\geq$ 12 hours; Brightness 100% $\geq$ 9 hours	
Files	USB storage (automatic saving of data files)	
Accessories	ATL501C Kelvin test clip ; ATL805 Li battery ; ATL508BChip testing clip ; Type-C ;	