## Model 6100U Standard for Automatic Calibration of LCR Meter





This model contains resistors, capacitors and inductors which are required for calibrating LCR Meters and can switch connections for measurement frequency, measurement voltage and calibration of DC BIAS voltage manually and automatically. As this compact and light weight unit can be directly connected to LCR Meter it is very convenient to calibrate in the field. Also full automatic LCR Meter calibration is available using software.

#### **Features**

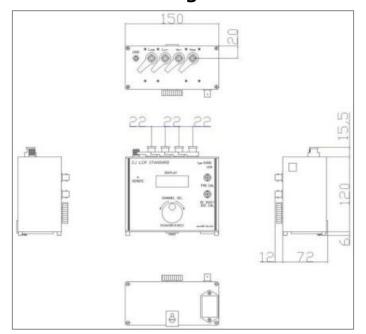
- 19 points of resistances, capacitances and inductances can be arbitrarily selected and can be switched manually or automatically via USB.
- Besides, terminals for measurement frequency, measurement voltage and calibration of DC BIAS voltage are provided and switching is done internally, calibrations can be done without re-connecting LCR Meter.
- Correction can be done without re-connecting LCR Meter as OPEN and SHORT corrective function is built-in.
- Using software, full automatic LCR Meter calibration is possible.
- Compact, light and 4-terminal structure enables direct connection to LCR Meter and suits calibration in the field.
- The unit can be used as a variable capacitance (4 ranges).

### **Specifications**

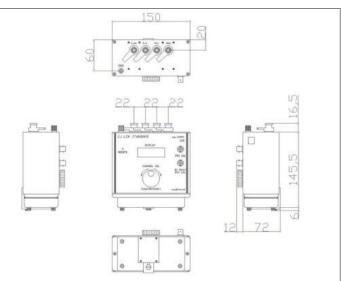
	SettingRange	Frequency	Accuracy	Temperature coefficient	Long Term Drift	Maximum Rating
Resistance	0.1~30Ω	1kHz	±0.1%	±10ppm/℃	±300ppm/year	0.5W
	30Ω~200kΩ		±0.01%		±100ppm/year	
	200kΩ~1MΩ		±0.02%			
Capacitance	1pF~10pF	1kHz	±1%	±50ppm/℃	±100ppm/year	15Vrms
	10pF~100pF		±0.5%			
	100pF~10μF		±0.05%			
	10μF~100μF	120Hz	±0.2%			3Vrms
	1mF		±0.4%			180mA
	10mF		±1%			500mA
	100mF					1A
Dissipation Factor	0.001~1.000 ( 1000 p F~10μF)	50Hz~1 k Hz 50Hz~120Hz	Less than±0.0001	±200ppm/℃	±300ppm/year	15Vrms
	0.001~1.000 ( 10μF~1mF)					3Vrms
Inductance	10µH∼10mH	1kHz	±0.5%	±50ppm/℃	±100ppm/year	10Vrms
	10mH∼1H			±250ppm/℃	±500ppm/year	3Vrms

- OPEN: less than 0.0001 pF (1 k Hz)
- SHORT: less than 1 m $\Omega$  (DC resistance), less than 50 nH (100kHz)
- Terminal: 4-terminal BNC Receptacle Type (can be changed)
- Power Supply: 9V 006P type dry cell battery (6 size AA batteries)
- Weight: approx. 1 kg
- Specifications are subject to change without notice due to improvement
- SunJEM will design products to meet your individual requirements. Please feel free to consult with us for products other than ready-made ones.

#### **Outline drawing**



#### **6size AA batteries**



# **Connection diagram at Calibration**

