

## BS1805 SilkyCase<sup>TM</sup>

3 5/6 Digits 6000 Counts Auto Range TRMS Multimeter with Capacitance, Frequency, Duty cycle and Temperature Measurements



BS1800 is our mellow and hot sell multimeter series. Its appearance has been transformed from traditional into a breakthrough modern elegant resembling double moulded "SilkyCase" design. This series has featured with backlight and variety functions to cover both the manual range BS1801/1802 and auto range BS1803/1804/1805. BS1800 SilkyCase series has been tested to comply with EN61010-1 CATHI 600V CE standard.

BS1805 is a newly launched 6000 Counts Auto Range model come with True RMS measurement for irregular waveform test under AC Measuring environment.



#### Features:

- 3 5/6 Digits Auto Range Multimeter
- 6000 Counts LCD display
- DC Voltage 600mV to 600V
- TRMS AC Voltage 600mV to 600V
- DC Current 600μA to 10A
- TRMS AC Current 600µA to 10A
- Resistance  $600\Omega$  to  $50M\Omega$
- Capacitance 60nF to 100uF
- Frequency 100Hz to 1MHz
- Temperature Measurement in degrees Centigrade and Fahrenheit
- Continuity/ Diode test
- Duty Cycle test
- Relative Measurement
- LED Backlight
- Low Battery Warning
- Auto Power Off
- Data Hold
- CAT III 600V CE-EMC & LVD (Pending)

### **General Specifications**

Display : 3 5/6 digits LCD with max. reading of 5999.
Polarity : Automatic, (-) negative polarity indication.

Zero adjustment : Automatic.

Over range indication : Only the MSD "OL" is displayed.

Power : Single, standard 9 volt battery NEDA 1604, JIS 006P, IEC6F22.

Dimension : 80 (W) x 150 (H) x 40 (D) mm. Weight : Approx. 320 g (including battery).



## **Electrical Specification**

Accuracies are ±(% of reading + number of least significant digits) at 23°C±5°C, less than 75%RH

## **DC Voltage Measurement**

Range	Resolution	Accuracy	Input Impedance	Overload Protection
600mV	0.1mV			
6V	0.001V	±(1.0% Read.	10MO	600V DC/AC **** °
60V	0.01V	+2dgt)	10MΩ	600V DC/AC rms
600V	1V			

## **TRMS AC Voltage Measurement**

Range	Resolution	Accuracy	Input Impedance	Overload Protection
600mV*	0.1mV			
6V	0.001V	±(1.5% Read.	10140	600V DC/AC **** °
60V	0.01V	+5dgt)	10MΩ	600V DC/AC rms
600V	1V			

<sup>\*</sup>Only available in manual mode Frequency range: 50-1kHz

### **DC Current Measurement**

Range	Resolution	Accuracy	Voltage drop	Overload Protection
600μΑ	0.1μΑ			
6000μΑ	1µA	±(1.2% Read. +	400mV	Fast 630mA/250V
60mA	0.01mA	2dgt)	400111 V	Fuse
600mA	0.1mA			
10A	0.01A	±(1.5% Read. + 5dgt)`	200mV	Fast 10A/250V Fuse



#### **TRMS AC Current Measurement**

Range	Resolution	Accuracy	Voltage drop	Overload Protection
600μΑ	0.1μΑ	±(1.0% Read. +		
6000μΑ	1µA	2dgt)	400mV	Fast 630mA/250V
60mA	0.01mA	±(1.2% Read. +	400III V	Fuse
600mA	0.1mA	5dgt)		
10A	0.01A	±(2.0% Read. + 5dgt)`	200mV	Fast 10A/250V Fuse

Frequency range: 40-1kHz

#### **Resistance Measurement**

Range	Resolution	Accuracy	Open circuit voltage	Overload Protection
600Ω	0.1Ω			
6kΩ	$0.001 \mathrm{k}\Omega$	±(1.20/ Dagd )	A	250V DC/AC rms <30 sec.
60kΩ	0.01kΩ	±(1.2% Read. +		
600kΩ	0.1kΩ	5dgt)	Approx. 0.2V	
6ΜΩ	$0.001 \mathrm{M}\Omega$		0.2 V	<30 sec.
50ΜΩ	0.01ΜΩ	±(2.0% Read. + 5dgt)		

## **Diode Test**

Range	Accuracy	Open circuit voltage	Overload Protection
<b>→</b>	Approx. 0.6mA	Approx.	250V DC/AC rms <30 sec.

# **Continuity Test**

Range	Buzzer sounds when resistance	Open circuit voltage	Overload Protection
•)))	value $\leq 100\Omega$	Approx. 0.5V	250V DC/AC rms <30 sec.



## **Capacitance Measurement**

Range	Resolution	Accuracy	<b>Overload Protection</b>
60nF	0.01nF		
600nF	0.1nF	±(2.50/ Dand + 5dat)	25011 DC/AC
6µF	0.001µF	$\pm (3.5\% \text{ Read.} + 5 \text{dgt})$	250V DC/AC rms <30 sec.
60μF	0.01µF		<30 sec.
100μF	0.1µF	$\pm (5.0\% \text{ Read.} + 5 \text{dgt})$	

Test Frequency: Approx. 20kHz

## **Frequency Measurement**

Dange	Deschution Assument		Input Volt.		Overload
Range	Resolution	Accuracy	Min.	Max.	Protection
100Hz	0.1Hz		1Vp-p	200V rms	
1kHz	0.001kHz	±(2.007 + 5)			600V DC/AC rms
10kHz	0.01kHz	$\pm (2.0\% + 5)$	4Vp-p	30V rms	<30 sec.
100kHz	0.1kHz		8Vp-p	20V rms	
1MHz	0.001MHz		12Vp-p	15V rms	

## **Duty Cycle Measurement**

Range	Resolution	Accuracy	Overload Protection
10 0007	0.01%	±(2.00/ Dood + 5dot)	250V DC/AC rms
10 – 90%	$0-90\%$ 0.01% $\pm (2.0\% \text{ Read.} + 5 \text{dgt})$	<30 sec.	

Min. input voltage: 400mV p-p

## **Temperature K-type Probe**

Range	Resolution	Accuracy	<b>Overload Protection</b>
-40 − 400°C	1°C	$\pm (0.75\% \text{ Read.} + 3 \text{dgt})$	Fast 630mA/250V
401 − 1000°C	1 (	$\pm (2.0\% \text{ Read.} + 5 \text{dgt})$	Fuse
-72 – 752°F	1°F	$\pm (0.75\% \text{ Read.} + 3 \text{dgt})$	250V DC/AC rms
$752 - 1832^{\circ}F$	1 Г	$\pm (2.0\% \text{ Read.} + 5 \text{dgt})$	<30 sec.

BST Caltek Industrial Ltd.

<u>www.bstcaltek.com</u> <u>www.htcaltek.com</u> www.caltek.com.hk www.finestcaltek.asia

Flat G, 2/F., Block 4, Golden Dragon Industrial Centre, 182-190 Tai Lin Pai Road, Kwai Chung, N.T., Hong Kong E-MAIL: sales@caltek.com.hk

TEL: (852) 2401-1222

FAX: (852) 2420-3472