

KWK RESISTORS INDIA



Programmable DC Electronic Load 150W-200W-300W Series

KELBXXX load is a precision programmable DC electronic load controlled by a high performance microprocessor. It uses 3.5-inch TFT true color LCD display offers 4 basic working modes (CC/CV/CR/CW) and 10 functional modes.

With comprehensive protection, over-heat protection, over-current protection, over-power protection, over-voltage protection, loop oscillation protection. KELBXXX series E-load supports RS232, LAN, USB and analog interfaces to fit your versatile solution and testing needs.



Test Function

4 basic working modes CC/CV/CR/CW and 11 functional modes multiple extended function modes:

- ◆ Short test function
- ◆ DYNA dynamic test function
- ◆ OCP over current protection mode
- ◆ BATT battery mode
- ◆ EFFT load effect mode
- ◆ SWEEP dynamic frequency conversion scanning function.
- ◆ TIMEING _me measurement function
- ◆ OVP over voltage protection mode
- ◆ AUTO mode
- ◆ LIST function
- ◆ LED (HP8151 has no LED mode)

Features

- ◆ 500 kHz high speed voltage, current sampling rate
- ◆ High precision voltage and current measurement
- ◆ Fast loop response speed and current slew rate
- ◆ Programmable single step up to 10μS
- ◆ Equipped with remote four –wire compensation
- ◆ Unique real-time display of current ripple and voltage ripple
- ◆ Real-time display of load power and resistance

Specification

Model	KELB151		KELB151A		KELB151B		KELB201	
Input Voltage	15V	150V	15V	150V	50V	500V	15V	150V
Input Current	3A	30A	3A	30A	1.5A	15A	3A	30A
Input Power	150W						200W	
Min.operation voltage	1.5V@30A				7.5V@15A		1.5V@30A	
Min rise time@ FS current	10μs							
CV Mode								
Range	15V	150V	15V	150V	50V	500V	15V	150V
Resolution	0.2mV	2mV	0.2mV	2mV	0.7mV	7mV	0.2mV	2mV
Accuracy	±(0.05%+0.025%FS)							
CC Mode								
Range	3A	30A	3A	30A	1.5A	15A	3A	30A
Resolution	0.04mA	0.4mA	0.04mA	0.4mA	0.02mA	0.2mA	0.04mA	0.4mA
Accuracy	±(0.03%+0.05%FS)							
CR Mode								
Range	0.1Ω-7.5kΩ		0.1Ω-7.5kΩ		0.1Ω-7.5kΩ		0.1Ω-7.5kΩ	
Resolution	16 Bits							
Accuracy	±0.1%							

KWK RESISTORS INDIA



Programmable DC Electronic Load 150W-200W-300W Series

CW Mode								
Range	150W					200W		
Resolution	16 Bits							
Accuracy	±(0.1%+0.1%FS)							
LED mode								
Bandwidth	-----		100kHz					
Rd coefficient	-----		0.001-1					
Dynamic mode								
Ta & Tb	10μs - 50s							
Min.resolution	10μs							
Min.rise time	1.5A/μs		1.5A/μs		0.8A/μs		1.5A/μs	
Read-back voltage								
Range	15V	150V	15V	150V	50V	500V	15V	150V
Resolution	0.1mV	1mV	0.1mV	1mV	0.3mV	3mV	0.1mV	1mV
Accuracy	±(0.025%+0.025%FS)							
Read-back current								
Range	3A	30A	3A	30A	1.5A	15A	3A	30A
Resolution	0.02mA	0.2mA	0.02mA	0.2mA	0.01mA	0.1mA	0.02mA	0.2mA
Accuracy	±(0.05%+0.05%FS)							
Read-back Ripple								
Range (R/I)	-----		150V/30A		500V/15A		150V/30A	
Bandwidth	-----		10Hz-250kHz					
Accuracy	±1%							
Protection Range								
Over-power protection	158W					210W		
Over-current protection	32A				16A		32A	
Over-voltage protection	158V				525V		158V	
Over-temperature protection	=85°C							
Specification								
Dimension (D*W*H)	358mm*214mm*88mm							
Gross Weight	3.8 Kg							

KWK RESISTORS INDIA



Programmable DC Electronic Load 150W-200W-300W Series

Model	KELB201B		KELB301		KELB301B		KELB301C	
Input Voltage	50V	500V	30V	150V	50V	500V	15V	150V
Input Current	1.5A	15A	3A	30A	1.5A	15A	6A	60A
Input Power	200W		300W					
Min.operation voltage	6.5V@15A		1V@30A		4V@15A		1.5V@60A	
Min rise time@ FS current	10μs				30μs		20μs	
CV Mode								
Range	50V	500V	30V	150V	50V	500V	15V	150V
Resolution	0.7mV	7mV	0.2mV	2mV	0.7mV	7mV	0.2mV	2mV
Accuracy	±(0.05%+0.05%FS)							
CC Mode								
Range	1.5A	15A	3A	30A	1.5A	15A	6A	60A
Resolution	0.02mA	0.2mA	0.04mA	0.4mA	0.02mA	0.2mA	0.09mA	0.9mA
Accuracy	±(0.05%+0.05%FS)							
CR Mode								
Range	0.1Ω-7.5kΩ		0.1Ω-7.5kΩ		0.1Ω-7.5kΩ		0.1Ω-7.5kΩ	
Resolution	16 Bits							
Accuracy	±0.1%							
CW Mode								
Range	200W		300W					
Resolution	16 Bits							
Accuracy	±(0.1%+0.1%FS)							
LED mode								
Bandwidth	100kHz							
Rd coefficient	0.001-1							
Dynamic mode								
Ta & Tb	10μs - 50s							
Min.resolution	10μs							
Min.rise time	0.8A/μs		1.5A/μs		0.8A/μs		3A/μs	
Read-back voltage								
Range	50V	500V	15V	150V	50V	500V	15V	150V
Resolution	0.3mV	3mV	0.1mV	1mV	0.3mV	3mV	1mV	0.1mV
Accuracy	±{0.025%+0.025%FS)							

KWK RESISTORS INDIA



Programmable DC Electronic Load 150W-200W-300W Series

Read-back current								
Range	1.5A	15A	3A	30A	1.5A	15A	6A	60A
Resolution	0.01mA	0.1mA	0.02mA	0.2mA	0.01mA	0.1mA	0.04mA	0.4mA
Accuracy	±(0.05%+0.05%FS)		±(0.05%+0.1%FS)					
Read-back Ripple								
Range (R/I)	500V/15A		150V/30A		500V/15A		150V/60A	
Bandwidth	10Hz-250kHz							
Accuracy	±1%							
Protection Range								
Over-power protection	210W		315W					
Over-current protection	16A		32A		16A		63A	
Over-voltage protection	525V		158V		525V		158V	
Over-temperature protection	=85°C							
Specification								
Dimension (D*W*H)	358mm*214mm*88mm							
Gross Weight	3.8 Kg							

Applications



KWK Resistors India Pvt. Ltd.

Reg. Office: B-81, Industrial Estate, Rajajinagar, Bengaluru-560044.India
 Works: #72, 3rd main, 2nd stage, Industrial suburb, Yeshwanthpur, Bengaluru-560022.India
 Ph.:+91-80-23370038, Tele/Fax:+91-80-23370046 Email: contact@kwk-resistors.in