

# Programmable DC Electronic Load

## DCH Series 150W-300W

### OVERVIEW

- DCH load is a precision programmable DC electronic load controlled by a high-performance microprocessor. It uses 3.5-inch TFT true color LCD display with Chinese and English menu.
- 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. DCH series E-load supports RS232, LAN, USB and analog interfaces to fit your versatile solution and testing needs.

### Test function

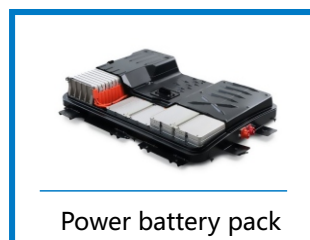
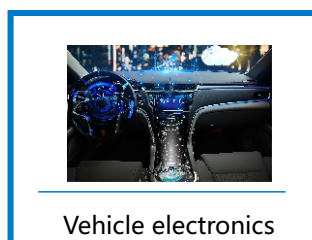
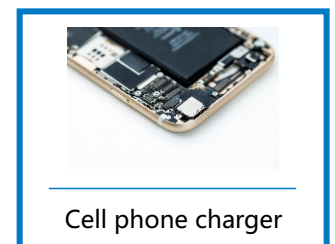
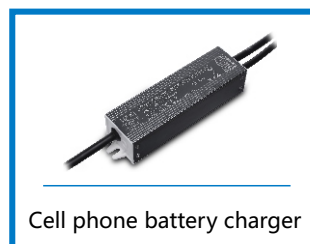
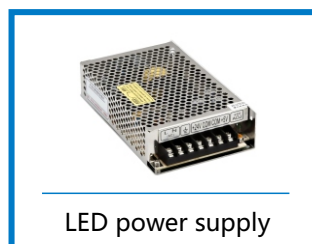
4 basic working modes CC/CV/CR/CW and 11 functional modes multiple extended function modes:

- 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

### (FEATURES)

- 500kHz 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 10 $\mu$ S
- Equipped with remote four-wire compensation
- Unique real-time display of current ripple and voltage ripple
- Real-time display of load power and resistance

### (APPLICATION)





ET SYSTEM®

**SPECIFICATION**

Model	DCH8151		DCH8151A		DCH8151B		DCH8201	
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	10us							
CV mode								
Range	15V	150V	15V	150V	50V	500V	15V	150V
Resolution	0.2mV	2m	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	±(0.05%+0.05%FS)							
CR mode								
Range	0.1Ω~7.5kΩ		0.1Ω~7.5kΩ		0.1Ω~7.5kΩ		0.1Ω~7.5kΩ	
Resolution	16Bits							
Accuracy	±0.1%							
CW mode								
Range	150W						200W	
Resolution	16Bits							
Accuracy	± (0.1%+0.1%FS)							
LED mode								
bandwidth	-----				100kHz			
Rd coefficient	-----				0.001~1			
Dynamic mode								
Ta& Tb	10uS~50s							
Min.resolution	10us							
Min. rise time	1.5A/us		1.5A/us		0.8A/us		1.5A/us	
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	3.8Kg							



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**SPECIFICATION**

Model	DCH8201B		DCH8301		DCH8301B		DCH8301C	
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.risetime@FScurrent	10us				30us		20us	
<b>CV mode</b>								
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)							
<b>CC mode</b>								
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)							
<b>CR mode</b>								
Range	0.1Ω~7.5kΩ		0.1Ω~7.5kΩ		0.1Ω~7.5kΩ		0.1Ω~7.5kΩ	
Resolution	16Bits							
Accuracy	±0.1%							
<b>CW mode</b>								
Range	200W		300W					
Resolution	16Bits							
Accuracy	± (0.1%+0.1%FS)							
<b>LED mode</b>								
bandwidth	100kHz							
Rd coefficient	0.001~1							
<b>Dynamic mode</b>								
Ta& Tb	10us~50s							
Min.resolution	10us							
Min. rise time	0.8A/us		1.5A/us		0.8A/us		3A/us	
<b>Read-back voltage</b>								
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)							
<b>Read-back current</b>								
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)					
<b>Read-back Ripple</b>								
Range(R/I)	500V/15A		150V/30A		500V/15A		150V/60A	
bandwidth	10Hz~250kHz							
Accuracy	±1%							
<b>Protection range</b>								
Over-power protection	210W		315W					
Over-current protection	16A		32A		16A		63A	
Over-voltage protection	525V		158V		525V		158V	
Over-temperature protection	≈85°C							
<b>Specification</b>								
Dimension (D*W*H)	358mm*214mm*88mm							
Gross Weight	3.8Kg							