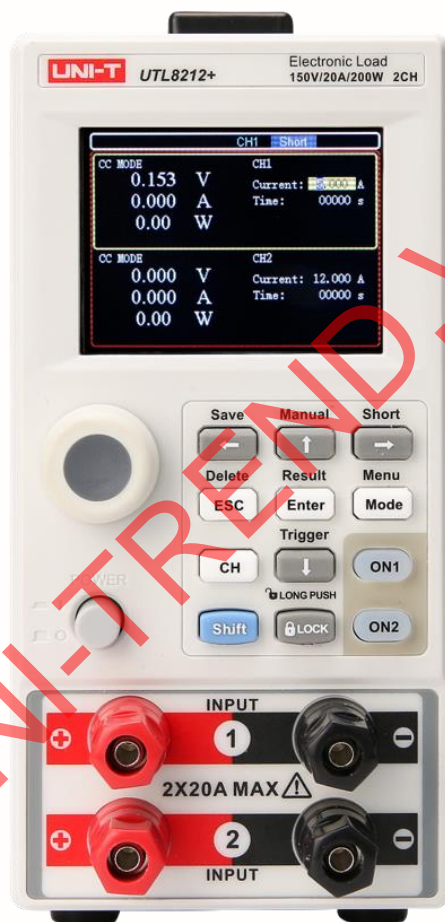


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Datasheet

UTL8200+ Series DC Electronic Load

1. Product Features

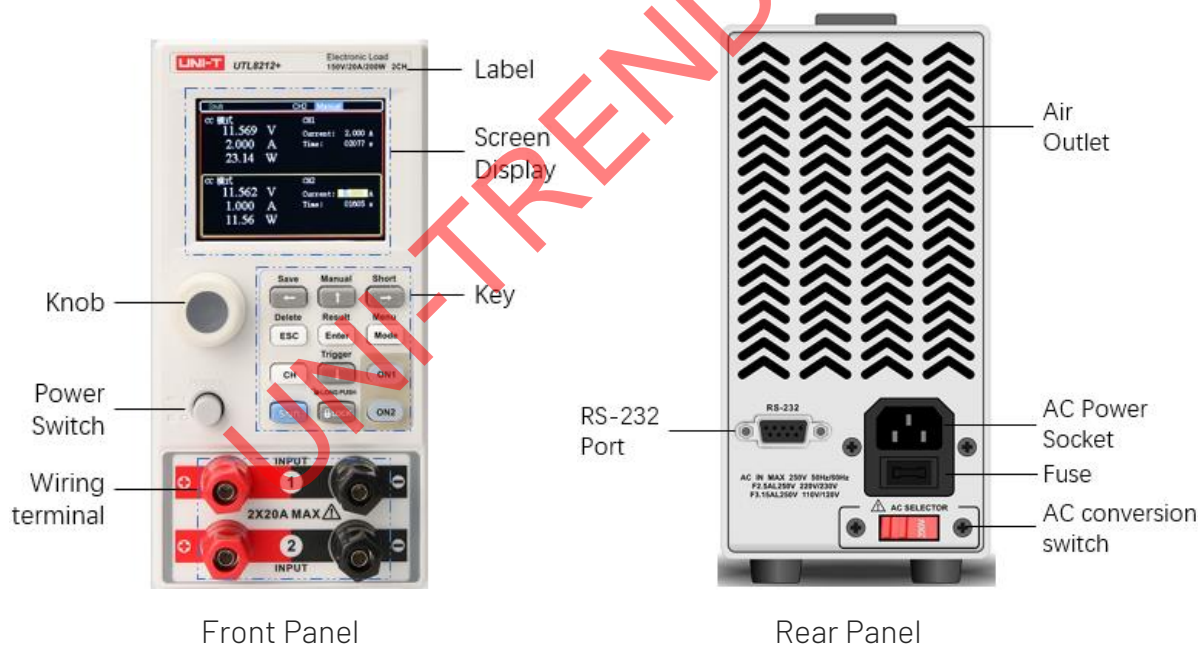
- 2.8 inch 24-bit true color LCD
- The maximum power 400W, the maximum current 40A, the maximum voltage 150V
- 4.8MHz synchronous current and voltage ADC sampling
- Single channel 400W or dual channel 200Wx2
- Measurement resolution is up to 1mV/1mA
- Four modes CC/CV/CR/CP
- Dynamic current test is up to 5kHz
- Rising and falling rate of programmable current
- Analog short circuit analog function
- Multi-mode battery discharge
- List mode supports automatic test and quick unload
- Overvoltage, low voltage, overcurrent, overpower, overheat protection and anti-reverse connection warning
- Electrode-less servo, smart fans system
- Power cutoff memory
- Standard RS232 port (RS485 port optional)
- Standard SCPI protocol
- Matched computer software for remote control and monitor

2. Product Introduction

UTL8200+ series DC electronic load is equipped with 2.8 inch true color LCD, which is convenient and simple to operate and has a fashionable appearance. With the help of 4.8MHz high-speed synchronous current and voltage ADC sampling and DSP technology, it can achieve up to 1mV/1mA measurement resolution.

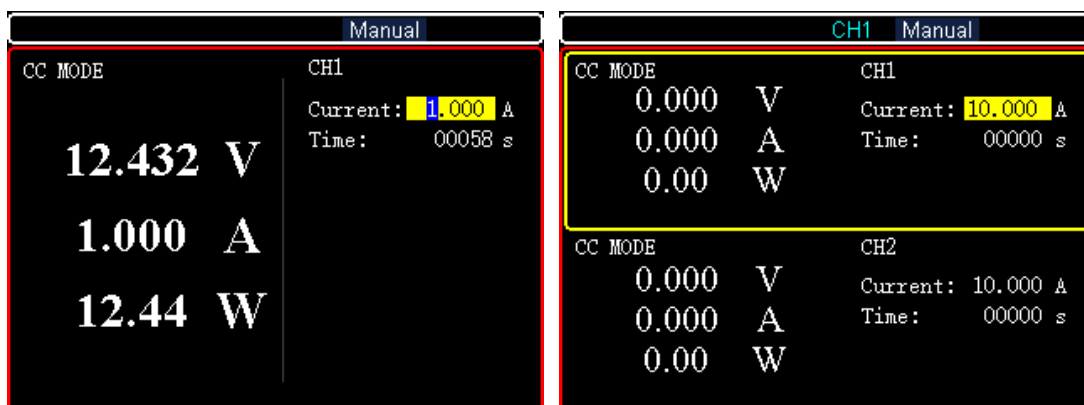
UTL8200+ series DC electronic load has a wide range of power, current and voltage test measurement range, it especially suitable for test and measurement of power supply and related industries; rising and falling rate of programmable current, up to 5kHz dynamic current load mode and list mode, these function can meet most research and development needs.

The electronic load is also equipped with RS-232C communication interface and adopts the standard SCPI protocol. With the function of fast unloading, so it can realize the seamless connection with the automatic production line and the test system.

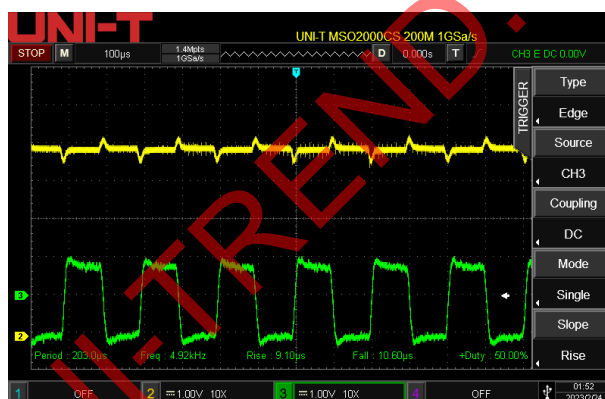


3. Design Highlights

2.8 inch 24-bit true color LCD

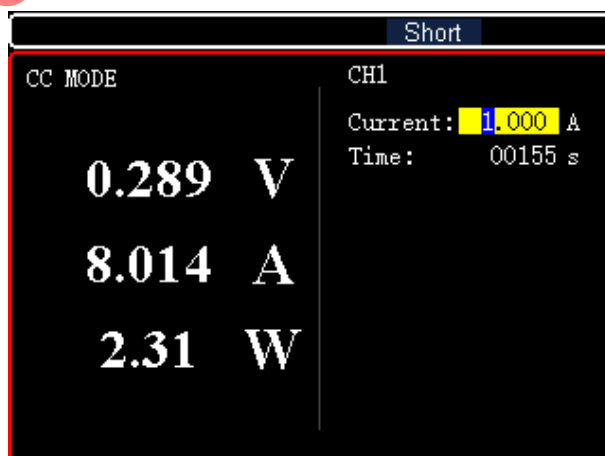


Dynamic load is up to 5kHz

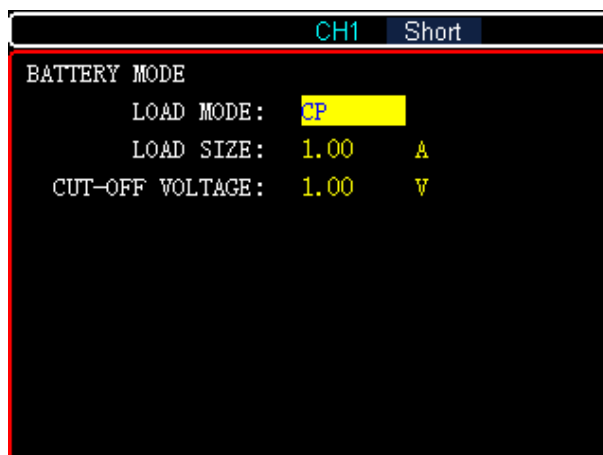


Built-in 7 test modes

Analog short circuit



Multi-mode battery discharge



Multi-function list mode

CH1 Manual

GROUP 00 STEP: 06 REPEAT: 00001 MODE: CONT

NO.	MODE	VALUE	TIME/ms	CHECK	LOWER	UPPER
1	CC	0.00	1000	OFF	0.00	0.00
2	CC	0.00	1000	OFF	0.00	0.00
3	CC	0.00	1000	OFF	0.00	0.00
4	CC	0.00	1000	OFF	0.00	0.00
5	CC	0.00	1000	OFF	0.00	0.00
6	CC	0.00	1000	OFF	0.00	0.00

SETUP: xxxx

Multiple protection function

Manual

<PARAMETER SETTING>

RUN TIME: — s	SHORT T: 100.0 ms
V LIMIT: 155.000 V	I LIMIT: 44.000 A
P LIMIT: 440.000 W	V ON: — V
V OFF: — V	V AUTO: — V
OVP: OFF	EX TRIG: ON/OFF
I SCALE: HIGH	V SCALE: HIGH
I RISE: 1.000 A/μs	V RATE: 1.000 V/ms
I FALL: 1.000 A/μs	SPEED: DEFAULT
	REVERSE: ON

4. Technical Index

Model		UTL8211+		UTL8212+	
Display Screen		LCD		LCD	
Rated Value 0~40℃	Input Voltage	0~150V		0~150V	
	Input Current	0~40A		0~20A (single group channel)	
	Input Power	400W		200W x 2	
	Minimum of Operating Voltage	2.0V at 40A		2.0V at 20A	
CV (Constant Voltage) Mode	Range	0~150V		0~150V	
	Resolution	1mV		1mV	
	Accuracy	$\pm(0.05\%+0.1\%FS)$		$\pm(0.05\%+0.1\%FS)$	
CC (Constant Current) Mode	Range	0~4A	0~40A	0~2A	0~20A
	Resolution	1mA	10mA	1mA	10mA
	Resolution	$\pm(0.1\%+0.1\%FS)$		$\pm(0.1\%+0.1\%FS)$	
CR (Constant Resistance) Mode	Range	0.05Ω~7.5KΩ		0.05Ω~7.5KΩ	
	Resolution	12bit		12bit	
	Accuracy	$\pm(0.3\%V_{in}/R_{set}+0.2\%IF.S)$		$\pm(0.3\%V_{in}/R_{set}+0.2\%IF.S)$	
CP (Constant Power) Mode	Range	400W		400W	
	Resolution	10mW		10mW	
	Accuracy	$\pm(0.1\%+0.5\%FS)$		$\pm(0.1\%+0.5\%FS)$	
Dynamic Mode	T1&T2	100μS~50S/Res:100μS		100μS~50S/Res:100μS	
	Rising/Falling slope	0.08A/mS~0.4A/μS		0.04A/mS~0.2A/μS	
	Minimum of Rising Time	100us		100us	
Readback Voltage	Range	0~15V	0~150V	0~15V	0~150V
	Resolution	1mV	10mV	1mV	10mV
	Accuracy	$\pm(0.1\%+0.1\%FS)$		$\pm(0.1\%+0.1\%FS)$	
Readback Current	Range	0~4A	0~40A	0~2A	0~20A
	Resolution	1mA	10mA	1mA	10mA
	Accuracy	$\pm(0.1\%+0.1\%FS)$		$\pm(0.1\%+0.1\%FS)$	

Readback Power	Range	400W	200W
	Resolution	10mW	10mW
	Accuracy	$\pm(0.1\%+0.5\%FS)$	$\pm(0.1\%+0.5\%FS)$
Overpower Protection		Delay protection, immediate protection	
Overcurrent Protection		Delay protection, immediate protection	
Overvoltage Protection		Delay protection, immediate protection	
Overtemperature Protection		$\geq 85^{\circ}C$	
Short Circuit		\checkmark	
Ripple Display		\checkmark	
Impedance of Input Terminal		300K Ω	
Fuse Specification		0.5A (110V)/0.25A (220V)	
Communication Interface		RS232	
Protocol		SCPI	
Data Acquisition Software		\checkmark	
Standard Attachment		Power line	
Power Requirements		110V $\pm 10\%$ /220V $\pm 10\%$ Frequency 50/60Hz	
Size mm (Length*Width* Height)		88W*174.6H*230Dmm	
Net Weight (kg)		3.42 KG	3.59 KG

5. Accessories and Optional

Item	Quantity	Remarks
DC Electronic Load	1	The model is subject to the actual order. UTL8211+ UTL8212+
Power cord	1	
RS232C communication line	1	no communication line for RS485 port
User's Manual	1	Electronic file can download from the official website
Fuse	2	

6. Contact Us

UNI-T Technical Support Hotline: 400-876-7822

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