



IT8500+ series single channel programmable electronic load with high density, high resolution and high accuracy supports dynamic test function, automatic test function, etc., which is suited for applications in areas such as LED driver testing, switching power testing, battery performance testing, etc. IT8500+ also provides standard SCPI protocol to build intelligent test platform that is ideal for multiple industries.

Applications

Battery test, lithium protection board test, power supply test, charger test, ATE, component test, etc.

Feature

- Four operating modes: CV, CC, CR, CP
- Battery test function, automatic test function, OPP test, OCP test function and CR-LED function
- Dynamic mode up to 10kHz
- Voltage measurement resolution up to 0.1mV / 0.1mA
- Remote sense
- Short circuit function
- Current monitoring function
- Power-off memory function
- 100 groups memory capacity
- Optional USB / RS232 / RS485 interface

*IT8514B+, IT8514C+, and IT8516C+ are built-in RS232 and USB interface

Model	Voltage	Current	Power	Size
IT8511A+	150V	30A	150W	1/2 2U
IT8511B+	500V	10A	150W	1/2 2U
IT8512A+	150V	30A	300W	1/2 2U
IT8512B+	500V	15A	300W	1/2 2U
IT8512C+	120V	60A	300W	1/2 2U
IT8512H+	800V	5A	300W	1/2 2U
IT8513A+	150V	60A	400W	1/2 2U
IT8513B+	500V	30A	600W	2U
IT8513C+	120V	120A	600W	2U
IT8514B+	500V	60A	1500W	2U
IT8514C+	120V	240A	1500W	2U
IT8516C+	120V	240A	3000W	4U

Optional interface

IT-E121	RS232 communication cable
IT-E122	USB communication cable

Automatic Test Function

IT8500+ supports two automatic test editing modes. One is special automatic test editing mode that can save up to 10 groups of test files, and the other is compatible with the IT8500 automatic test editing mode that can save up to 50 groups of test files, both of which can be called and tested at any time. Test operation is simple, the button can be completely locked to prevent accidental touch on the keyboard from affecting normal testing.



Constant Current(CC)

In CC mode, the electronic load will sink a constant current regardless of the changes of input voltage.



Constant Voltage (CV)

In CV mode, the electronic load will attempt to sink enough current to control the source voltage to the programmed value.



Constant Resistance (CR)

In CR mode, the module will sink a current linearly proportional to the input voltage in accordance with the programmed resistance.



Constant Power (CW)

In CP mode, the electronic load will dissipate power in accordance with the programmed value.

If input voltage increase, input current will decrease.

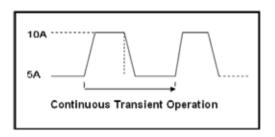


Transient Mode

Transient operation enables the module to periodically switch between two load levels, as might be required for testing power supplies. Transient operation can be turned on and off from the front panel (shift + numeric key"2"). Before you turn on the operation, you should set the parameters associated with the transient operation. The parameters include: A level, B level, frequency, duty cycle and transient testing modes. There are three different transient testing modes: continuous, pulse, and toggle.

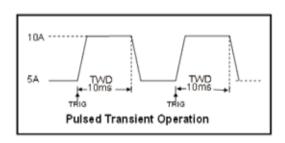
Continuous Mode

In continuous mode, the electronic load generates a repetitive pulse stream that toggles between two load levels. Load could switch the state between two value settings, A/B.



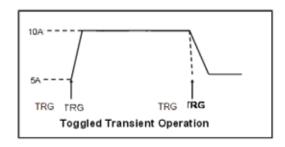
Pulse Mode

In pulse mode, the electronic load generates a transient pulse of programmable width when pulse transient operation is in effect. The load will automatically switch to A level after maintaining A width time. Then it will switch to B level. The load will not switch to A level again until the instrument receives the pulse signal.



Toggle Mode

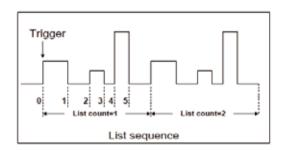
In toggle mode, the electronic load will switch between A level and B level when receiving a trigger signal after the transient operation is enabled. The following picture shows the current waveform in toggle transient operation.





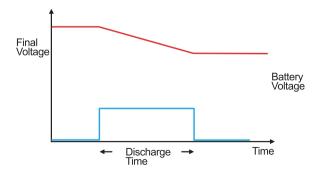
List Mode

List mode allows you to generate a complex current sequence. Moreover, the mode change can be synchronized with an internal or external signal, to accomplish dynamic and precise test which can save cost for users. Users can edit step value, pulse width and slope sequence and meet a complex test request. A list file includes following parameters: file name step counts (range 2-84), time width of single step (0.00005s-3600s), step value and slope. The edited list file can be recalled easily. The DC load provides 7 nonvolatile registers to save list files setting for recall later. In the list mode, the load starts to run the list file once receiving a trigger signal, continue to run until end of the operation or receiving another trigger.



Battery Mode

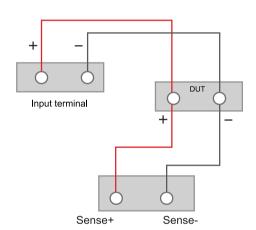
Battery discharge test of IT8500+ series can be achieved under CC mode. There are three cut-off conditions for IT8500+ include cut-off voltage, cut-off capacity and cut-off time, when any of the three conditions are met, discharge test will be stopped, the load will be automatically switched to OFF. Moreover, the battery voltage, discharge time and discharged capacity can be observed during the test.



Battery discharge function

Remote Sense

When working in CC, CV, CP and CR mode, if the electronic load consumes a very large current, it will cause a voltage drop in the leads between the connected device and terminals of the electronic load. In order to ensure testing accuracy, the electronic load provides a pair of remote sensing terminals in the rear panel where users can sense the output terminal voltage of the connected device. Users should set the electronic load in REMOTE SENSE mode before using this function. By eliminating the effect of the voltage drop in the load leads, remote sensing provides greater accuracy by allowing the electronic load to regulate directly at the source's output terminals.



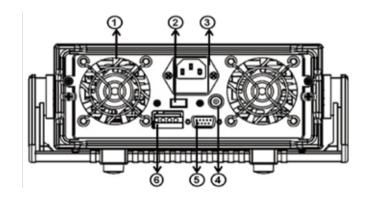


IT8500+ Specifications

		IT8511A+		IT8511B+		IT8512A+		
	Voltage			0~500V		0~150V		
Rated	Current	0~3A	0~30A	0~3A	0~10A	0~3A	0~30A	
0~40 °C)	Power	15		150W		300W		
,	MOV	0.25V at 3A	3V at 30A	1.2V at 3A	4V at 10A	0.14V at 3A	1.4V at 30A	
CV mode	Range	0.1~18V	0.1~150V	0.1~50V	0.1~500V	0.1~18V	0.1~150V	
	Resolution	1mV	10mV	1mV	10mV	1mV	10mV	
	Accuracy	±(0.05%+0.02%FS)	±(0.05%+0.025%FS)	±(0.05%+0.05%FS)	±(0.05%+0.05%FS)	±(0.05%+0.02%FS)	±(0.05%+0.025%FS	
CC mode	Range	0~3A	0~30A	0~3A	0~10A	0~3A	0~30A	
	Resolution	0.1mA	1mA	0.1mA	1mA	0.1mA	1mA	
	Accuracy	±(0.05%+	0.05%FS)	±(0.05%+0.05%FS)		±(0.05%+0.05%FS)		
	Range	0.05Ω~10Ω	10Ω~7.5KΩ	0.5Ω~10Ω	10Ω~7.5KΩ	$0.05\Omega\sim10\Omega$	10Ω~7.5KΩ	
CR mode	Resolution	16	Bbit	16	bit	10	Sbit	
	Accuracy	0.01%+0.08S *2	0.01%+0.0008S	0.01%+0.08S *2	0.01%+0.0008S	0.01%+0.08S *2	0.01%+0.0008S	
	Range	15	OW	150W		300W		
CP mode	Resolution	10mW		10mW		10mW		
	Accuracy	± (0.1%+0.1%FS)		±(0.1%+0.2%FS)		± (0.1%+0.1%FS)		
Dynamic	T1&T2	20μS~3600S /Res:1 μS		20μS~3600	20μS~3600S /Res:1 μS		20μS~3600S /Res:1 μS	
,	Accuracy	2μS±100ppm		2μS±100ppm		2μS±100ppm		
mode	Up/down slope	0.0001~0.12A/μs ≈ 20μS	0.001~0.6 A/μS ≈ 30μS	0.0001~0.2A/µS ≈ 10µS	$0.001 \sim 0.8 \text{A/}\mu\text{S} \approx 10 \mu\text{S}$	0.0001~0.2A/μS	0.001~1.5A/μS	
	_	- 1911		Measurir				
Readback	Range	0~18V	0~150V	0~50V	0~500V	0~18V	0~150V	
Voltage	Resolution	0.1 mV	1mV	1 mV	10 mV	0.1 mV	1 mV	
Vollage	Accuracy	,	0.025%FS)	±(0.025%+0.025%FS)		±(0.025%+0.025%FS)		
Readback	Range	0~3A	0~30A	0~3A	0~10A	0~3A	0~30A	
Current	Resolution	0.1mA	1mA	0.1mA	1mA	0.1mA	1mA	
Junent	Accuracy	,	0.05%FS)	±(0.05%+0.05%FS)		±(0.05%+0.05%FS)		
Readback	Range		0W	150W		300W		
Power	Resolution	10mW		10mW		10mW		
rowei	Accuracy	±(0.1%+0.1%FS)		±(0.1%+0.2%FS)		±(0.1%+0.1%FS)		
					ed range			
Over power p			60W		60W		320W	
Over current		≈ 3.3A	≈33A	≈3.3A	≈11A	≈ 3.3A	≈ 33A	
Over voltage protection		≈ 160V		≈ 530V ≈ 85°C		≈ 160V		
Over temper	ature protection	≈{	35°C			≈ (35°C	
					fication			
	CC	≈ 3.3/3A	≈ 33/30A	≈ 3.3/3A	≈ 11/10A	≈3.3/3A	≈33/30A	
Short circuit	CV		0V	≈0V		≈ 0V		
	CR	≈ 80mΩ		≈ 400mΩ		≈ 180mΩ		
Input terminal impedance		150ΚΩ		1ΜΩ		150ΚΩ		
Size(W*H*D)		214.5mm*88.2mm*354.6mm		214.5mm*88.2mm*354.6mm		214.5mm*88.2mm*354.6mm		

*This information is subject to change without notice

IT8511A+ / IT8512A+ / IT8511B+ / IT8512B+ / IT8512C+ / IT8512H+ / IT8513A+ / IT8513C+



- ① Air vents
- ② Voltage switch (110V/220V)
- $\ \, \textbf{3) AC line input}$
- **4** Current monitoring Terminal
- ⑤ 9-Pin serial port interface connector
- **(6)** Trigger and remote sensing terminal block



IT8500+ Specifications

	Maltana	IT851:			12C+	IT851	
Rated	Voltage Current	0~50 0~3A	0V 0~15A	0~12 0~6A	20V 0~60A	0~80	
	Power	U~3A 300¹		0~6A 0~60A		0~1A 0~5A 300W	
0∼40 °C)	MOV	0.6V/3A	W 3V/15A	0.25V/6A	2.5V/60A	1.4V at 1A	7V at 5A
	Range	0.6V/3A 0~50V	0~500V	0.25V/6A 0~18V	2.5V/60A 0~120V	0.1~80V	0.1~800V
V mode							
v mode	Resolution	1mV	10mV	1mV	10mV	1mV	10mV
	Accuracy	±(0.05%+0.02%FS)	±(0.05%+0.025%FS)	±(0.05%+0.02%FS)	±(0.05%+0.025%FS)	±(0.05%+0.05%FS)	±(0.05%+0.05%F
	Range	0~3A	0~15A	0~6A	0~60A	0~1A	0~5A
C mode	Resolution	0.1mA	1mA	0.1mA	1mA	0.1mA	1mA
	Accuracy	±(0.05%+0.05%FS)	±(0.05%+0.05%FS)	±(0.05%+0.05%FS)	±(0.05%+0.05%FS)	±(0.05%+0.1%FS)	\pm (0.05%+0.05%F
	Range	0.3Ω~10Ω	10Ω~7.5KΩ	0.3Ω~10Ω	10Ω~7.5KΩ	2Ω~10Ω	10Ω~7.5KΩ
R mode	Resolution	16b	it	16	bit	166	oit
	Accuracy	0.01%+0.08S	0.01%+0.0008S	0.01%+0.08S	0.01%+0.0008\$	0.01%+0.08S*2	0.01%+0.0008S
	Range			300W		300	
CP mode Resolution		10mW		10mW			
modo	Accuracy	± (0.1%+0.1%FS)		± (0.1%+0.1%FS)		10mW 0.2%+0.2%FS	
	T1&T2	± (0.1%+0.1%FS) 50μS~3600S /Res:1 μS					
namic				50μS~3600S /Res:1 μS 5μS±100ppm		20μS~3600S /Res:1 μS 2μS±100ppm	
ode	Accuracy	5μS±100ppm					
	Up/down slope	0.0001~0.2A/μS ≈ 10μS	0.001~0.8A/µS ≈ 10µS	0.0001~0.3A/μS	0.001~3A/μS	0.0001~0.04A/μS≈20μS	0.001~0.2A/μS ≈ 20
	Danier	0.501/	0.5001/	Measurin		0.001/	0.0001/
adback	Range	0~50V	0~500V	0~18V	0~120V	0~80V	0~800V
Itage	Resolution	1 mV	10 mV	1 mV	10 mV	1 mV	10 mV
iuye	Accuracy	±(0.025%+0		±(0.025%+0		±(0.025%+0	
adback	Range	0~3A	0~15A	0~6A	0~60A	0~1A	0~5A
	Resolution	0.1mA	1mA	0.1mA	1mA	0.1mA	1mA
rrent	Accuracy	±(0.05%+0	.05%FS)	±(0.05%+0	0.05%FS)	±(0.05%+0	0.05%FS)
	Range	300		300		300	
adback	Resolution	10m		10n		10m	
wer	Accuracy	±(0.1%+0				±(0.2%+0	
	Accuracy	±(U.1%+U	.1 /01 3)	±(0.1%+0		±(0.2%+0	1.4 /0F3)
or nower :	rotootion		0)4/		red range		OW
er power pr		≈32		≈32		≈ 32	
er current p		≈ 3.3A	≈ 16A	≈ 6.5A	≈ 65A	≈ 1.1A	≈ 5.5A
/er voltage p		≈ 53		≈ 12		≈ 85	
er tempera	ture protection	≈ 85	°C	≈ 85		≈ 85	5°C
				Specifi	cation		
	CC	≈3.3/3A	≈ 16/15A	≈ 6.5A	≈ 65A	≈ 1.1/1A	≈5.5/5A
ort circuit	CV	≈0		≈(≈(,
ort onbuit	CR	≈ 180		~ 40 ≈ 40		≈1.	
put terminal	_	= 100 1M:		≈ 40 150		≈ 1. 2M	
	impedance						
ze(W*H*D)		214.5mmW*354.6 IT851		214.5mmW*354.6 IT851		214.5mmW*354.6	
	Maltana					IT851	
	Voltage	0~15		0~50		0~12	
ated	Current	0~6A	0~60A	0~3		0~12A	0~120A
)∼40 °C)	Power	400		600		600	
	MOV	0.25V at 6A	2.5V at 60A	0.25V at 6A	2.5V at 60A	0.2V at 12A	2V at 120A
	Range	0.1~18V	0.1~150V	0~18V	0~150V	0.1~18V	0.1~120V
V mode	Resolution	1mV	10mV	1mV	10mV	1mV	10mV
	Accuracy	±(0.05%+0.02%FS)	±(0.05%+0.025%FS)	±(0.05%+0.02%FS)	±(0.05%+0.025%FS)	±(0.05%+0.02%FS)	±(0.05%+0.025%FS
	Range	0~6A	0~60A	0~3A	0~30A	0~12A	0~120A
mode	-	00A	1mA	1mA			
C mode	Resolution Accuracy	0.1mA	IIIIA		10mA	1mA	10mA
		0.1mA			1/0 00/ 10 1E0/ EC)	. (0 0E0/ . 0 0E0/ E0)	
	_	±(0.05%+0.05%FS)	±(0.05%+0.1%FS)	±(0.1%+0.1%FS)	±(0.2%+0.15%FS)	±(0.05%+0.05%FS)	±(0.05%+0.1%FS)
	Range	±(0.05%+0.05%FS) 0.1Ω~10Ω	±(0.05%+0.1%FS) 10Ω~7.5KΩ	±(0.1%+0.1%FS) <100Ω	<4KΩ	0.05Ω~10Ω	±(0.05%+0.1%FS) 10Ω~7.5KΩ
R mode	_	±(0.05%+0.05%FS) 0.1Ω~10Ω	±(0.05%+0.1%FS) 10Ω~7.5KΩ	±(0.1%+0.1%FS) <100Ω 0.01Ω	<4KΩ 1Ω	0.05Ω~10Ω 16l	$\pm (0.05\% + 0.1\% FS)$ $10\Omega \sim 7.5 K\Omega$ oit
R mode	Range	±(0.05%+0.05%FS) 0.1Ω~10Ω	±(0.05%+0.1%FS) 10Ω~7.5KΩ	±(0.1%+0.1%FS) <100Ω	<4KΩ	0.05Ω~10Ω	±(0.05%+0.1%FS) 10Ω~7.5KΩ
R mode	Range Resolution	±(0.05%+0.05%FS) 0.1Ω~10Ω	$\pm (0.05\% + 0.1\% FS)$ $10\Omega \sim 7.5 K\Omega$ oit 0.01% + 0.0008S	±(0.1%+0.1%FS) <100Ω 0.01Ω	<4KΩ 1Ω	0.05Ω~10Ω 16l	$\pm (0.05\% + 0.1\% FS)$ $10\Omega \sim 7.5 K\Omega$ bit 0.01% + 0.0008S
	Range Resolution Accuracy	±(0.05%+0.05%FS) 0.1Ω~10Ω 16b 0.01%+0.08S	±(0.05%+0.1%FS) 10Ω~7.5KΩ sit 0.01%+0.0008S	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S	<4KΩ 1Ω 0.01%+0.0008S	0.05Ω~10Ω 16l 0.01%+0.08S *2	$\pm (0.05\% + 0.1\% FS)$ $10\Omega \sim 7.5 K\Omega$ 0.01% + 0.0008S
	Range Resolution Accuracy Range Resolution	±(0.05%+0.05%FS) 0.1Ω~10Ω 16b 0.01%+0.08S 400' 10m	±(0.05%+0.1%FS) 10Ω~7.5KΩ sit 0.01%+0.0008S W	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW	<4KΩ 1Ω 0.01%+0.0008S 100~600W 100mW	0.05Ω~10Ω 16t 0.01%+0.08S ² 600 10m	$\pm (0.05\% + 0.1\% FS)$ $10\Omega - 7.5K\Omega$ bit $0.01\% + 0.0008S$ W
mode	Range Resolution Accuracy Range Resolution Accuracy	±(0.05%+0.05%FS) 0.1Ω~10Ω 16b 0.01%+0.08S 400' 10m ±(0.2%+0	±(0.05%+0.1%FS) 10Ω-7.5KΩ 0.01%+0.0008S W W 1.2%FS)	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.010+0.08S 0-100W 1mW 1%+0.3%FS	<4KΩ 1Ω 0.01%+0.0008S 100~600W 100mW 1%+0.8%FS	0.05\(\Omega-10\Omega\) 0.01\(%+0.08\S^{\circ}\) 600 10n \(\pm(0.2\) \((0.2\)	±(0.05%+0.1%FS) 10Ω-7.5KΩ sit 0.01%+0.0008S W W .2%FS)
o mode	Range Resolution Accuracy Range Resolution Accuracy T1&T2	±(0.05%+0.05%FS) 0.1Ω~10Ω 16b 0.01%+0.08S 400' 10m ±(0.2%+0	±(0.05%+0.1%FS) 10Ω-7.5KΩ 0.01%+0.0008S W W 1.2%FS) i /Res:1 μS	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100μS-3600	<4KΩ 1Ω 0.01%+0.0008S 100~600W 100mW 1%+0.8%FS S /Res:1 μS	0.05Ω~10Ω 16l 0.01%+0.08S ² 600 10m ± (0.2%+6 100μS~3600	±(0.05%+0.1%FS) 10Ω-7.5KΩ 0.01%+0.0008S W WW 1.2%FS) S /Res:1 μS
o mode	Range Resolution Accuracy Range Resolution Accuracy T1&T2 Accuracy	±(0.05%+0.05%FS) 0.1Ω-10Ω 16b 0.01%+0.08S 400' 10m ±(0.2%+0 20μS-3600S 2μs+10	±(0.05%+0.1%FS) 10Ω-7.5KΩ it 0.01%+0.0008S W W 1.2%FS) // Res:1 μS Oppm	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100μS-3600	<4KΩ 1Ω 0.01%+0.0008S 100~600W 100mW 1%+0.8%FS S /Res:1 μS 00ppm	0.05\(\Omega-10\Omega) \\ 0.01\(\pi+0.08\S^{\color{2}}\) 600 10m \(\pm\((0.2\pi+0.08\S^{\color{2}}\) 100\(\pm\(S-3600\) 10\(\pm\(S-3600\) 10\(\pm\(S\text{+})\)	±(0.05%+0.1%FS) 10Ω-7.5KΩ iit 0.01%+0.0008S W W 0.2%FS) 5./Res:1 μS 00ppm
o mode	Range Resolution Accuracy Range Resolution Accuracy T1&T2	±(0.05%+0.05%FS) 0.1Ω~10Ω 16b 0.01%+0.08S 400' 10m ±(0.2%+0	±(0.05%+0.1%FS) 10Ω-7.5KΩ 0.01%+0.0008S W W 1.2%FS) i /Res:1 μS	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100μS-3600 10μS±1 0.001~0.05A/μS	<4KΩ 1Ω 0.01%+0.0008S 100-600W 100mW 1%+0.8%FS S /Res:1 μS 00ppm 0.01~0.5A/μS	0.05Ω~10Ω 16l 0.01%+0.08S ² 600 10m ± (0.2%+6 100μS~3600	±(0.05%+0.1%FS) 10Ω~7.5KΩ it 0.01%+0.0008S W W 0.2%FS) 5/Res:1 μS 00ppm
o mode rnamic ode	Range Resolution Accuracy Range Resolution Accuracy T1&T2 Accuracy Up/down slope	±(0.05%+0.05%FS) 0.1Ω~10Ω 16b 0.01%+0.08S 400 10m ±(0.2%+0 20μS~3600S 2μs+10 0.001~0.15A/μS	±(0.05%+0.1%FS) 10Ω-7.5KΩ 0.01%+0.0008S W W 1.2%FS) //Res:1 μS 0ppm 0.01~1 A/μS	±(0.1%+0.1%FS) <100Ω 0.010 0.010 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100μS-3600 10μS±1 0.001~0.05A/μS Measurin	<4KΩ 1Ω 0.01%+0.0008S 100~600W 100mW 1%+0.8%FS S/Res:1 μS 00ppm 0.01~0.5A/μS	0.05Ω~10Ω 16l 0.01%+0.08S 2 600 10m ± (0.2%+(100µS~3600 10µS±1 0.001~0.2A/µS ≈ 60µS	±(0.05%+0.1%FS) 10Ω-7.5KΩ 0.01%+0.0008S W W 1.2%FS) S /Res:1 μS 00ppm 0.01~1.6A/μS ≈ 60μ
o mode rnamic ode	Range Resolution Accuracy Range Resolution Accuracy T1&T2 Accuracy Up/down slope Range	±(0.05%+0.05%FS) 0.1Ω~10Ω 16b 0.01%+0.08S 400' 10m ±(0.2%+0 20μS~3600S 2μs+10 0.001~0.15A/μS	±(0.05%+0.1%FS) 10Ω-7.5KΩ 0.01%+0.0008S W W 1.2%FS) //Res:1 μS 0ppm 0.01~1 A/μS	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0~100W 1mW 1%+0.3%FS 100μS~3600 10μS±1 0.001~0.05A/μS Measurin 0~18V	<4KΩ 1Ω 0.01%+0.0008S 100~600W 100mW 1%+0.8%FS S /Res:1 μS 00ppm 0.01~0.5A/μS 1g range 0~500V	0.05Ω~10Ω 16l 0.01%+0.08S *2 6000 10m ± (0.2%+€ 100µS~3600 10µS±1 0.001~0.2A/µS ≈ 60µS	±(0.05%+0.1%FS) 10Ω-7.5KΩ 0.01%+0.0008S W W 1.2%FS) S /Res:1 μS 1.200ppm 0.01~1.6A/μS ≈ 60μ 0~120V
P mode rnamic ode	Range Resolution Accuracy Range Resolution Accuracy T1&T2 Accuracy Up/down slope Range Resolution	±(0.05%+0.05%FS) 0.1Ω~10Ω 16b 0.01%+0.08S 400 10m ±(0.2%+0 20μS~3600S 2μs+10 0.001~0.15A/μS	±(0.05%+0.1%FS) 10Ω-7.5KΩ it 0.01%+0.0008S W W 1.2%FS) //Res:1 μS Oppm 0.01~1 A/μS 0-150V 1mV	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100μS-3600 10μS±1 0.001~0.05A/μS Measurin 0-18V 1 mV	<4KΩ 1Ω 0.01%+0.0008S 100~600W 1000W 1*+0.8%FS S /Res:1 μS 00ppm 0.01~0.5A/μS 1g range 0~500V 10mV	0.05 Ω ~10 Ω 16l 0.01%+0.08S '2 6000 10m ± (0.2%+€ 100µS~3600 10µS±1 0.001~0.2A/µS ≈ 60µS	±(0.05%+0.1%FS) 10Ω-7.5KΩ it 0.01%+0.0008S W W 0.2%FS) 5/Res:1 μS 00ppm 0.01~1.6A/μS ≈ 60μ 0~120V 1mV
R mode P mode rnamic ode eadback oltage	Range Resolution Accuracy Range Resolution Accuracy T18.T2 Accuracy Up/down slope Range Resolution Accuracy	$ \begin{array}{c} \pm (0.05\% + 0.05\% FS) \\ 0.1\Omega - 10\Omega \end{array} $ 16b $ 0.01\% + 0.08S \\ 400' \\ 10m \\ \pm (0.2\% + 0.00) \\ 20\mu S - 3600S \\ 2\mu S + 10 \\ 0.001 - 0.15A/\mu S \\ 0 - 18V \\ 0.1 \ mV \\ \pm (0.025\% + 0.00) \end{array} $	±(0.05%+0.1%FS) 10Ω-7.5KΩ iit 0.01%+0.0008S W W 2.2%FS) i/Res:1 μS 0ppm 0.01~1 A/μS 0~150V 1mV	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100μS-3600 10μS±1 0.001~0.05A/μS Measurin 0~18V 1 mV ±(0.025%+4	<4KΩ 1Ω 0.01%+0.0008S 100-600W 100mW 1%+0.8%FS S /Res:1 μS 00ppm 0.01~0.5A/μS ig range 0~500V 10mV	$0.05\Omega \sim 10\Omega$ 161 $0.01\% + 0.08S$ 2 600 10m \pm (0.2%+(10µS-3600 10µS±1 0.001~0.2A/µS ≈ 60µS 0-18V 0.1 mV \pm (0.025%+($\pm (0.05\% + 0.1\% FS)$ $10\Omega - 7.5K\Omega$ iit $0.01\% + 0.0008S$ W W 2.2%FS) S /Res:1 μS 00ppm $0.01 - 1.6A/μS \approx 60μ$ $0 - 120V$ $1mV$
namic ode eadback	Range Resolution Accuracy Range Resolution Accuracy T18T2 Accuracy Up/down slope Range Resolution Accuracy Range	$ \begin{array}{c} \pm (0.05\% + 0.05\% FS) \\ 0.1\Omega - 10\Omega \\ \end{array} $ 16b $ 0.01\% + 0.08S \\ 400' \\ 10m \\ \pm (0.2\% + 0.00\% + 0$	±(0.05%+0.1%FS) 10Ω-7.5KΩ iit 0.01%+0.0008S W W 2.2%FS) //Res:1 μS 0ppm 0.01~1 A/μS 0-150V 1mV .025%FS) 0-60A	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100μS-3600 10μS±1 0.001~0.05A/μS Measurin 0-18V 1 mV ±(0.025%+0	<4KΩ 1Ω 0.01%+0.0008S 100-600W 100mW 1%+0.8%FS S/Res:1 μS 00ppm 0.01~0.5A/μS 1g range 0~500V 10mV 0.025%FS) 0~30A	$0.05\Omega \sim 10\Omega$ 16l $0.01\% + 0.08S$ 2 600 10m \pm (0.2%+(100 μ S-3600 10 μ S-3	$\pm (0.05\% + 0.1\% FS)$ $10\Omega - 7.5K\Omega$ it $0.01\% + 0.0008S$ W W $1.2\% FS$
mode namic de adback ltage	Range Resolution Accuracy Range Resolution Accuracy T18.T2 Accuracy Up/down slope Range Resolution Accuracy	$ \begin{array}{c} \pm (0.05\% + 0.05\% FS) \\ 0.1\Omega - 10\Omega \end{array} $ 16b $ 0.01\% + 0.08S \\ 400' \\ 10m \\ \pm (0.2\% + 0.00) \\ 20\mu S - 3600S \\ 2\mu S + 10 \\ 0.001 - 0.15A/\mu S \\ 0 - 18V \\ 0.1 \ mV \\ \pm (0.025\% + 0.00) \end{array} $	±(0.05%+0.1%FS) 10Ω-7.5KΩ iit 0.01%+0.0008S W W 2.2%FS) i/Res:1 μS 0ppm 0.01~1 A/μS 0~150V 1mV	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100μS-3600 10μS±1 0.001~0.05A/μS Measurin 0~18V 1 mV ±(0.025%+4	<4KΩ 1Ω 0.01%+0.0008S 100-600W 100mW 1%+0.8%FS S /Res:1 μS 00ppm 0.01~0.5A/μS ig range 0~500V 10mV	$0.05\Omega \sim 10\Omega$ 161 $0.01\% + 0.08S$ 2 600 10m \pm (0.2%+(10µS-3600 10µS±1 0.001~0.2A/µS ≈ 60µS 0-18V 0.1 mV \pm (0.025%+($\pm (0.05\% + 0.1\% FS)$ $10\Omega - 7.5K\Omega$ iit $0.01\% + 0.0008S$ W W 2.2%FS) 5 /Res:1 μS 200ppm $0.01 \sim 1.6 A / μS \approx 60 \mu$ $0 \sim 120V$ 1mV
mode namic de adback ltage	Range Resolution Accuracy Range Resolution Accuracy T18T2 Accuracy Up/down slope Range Resolution Accuracy Range	$ \begin{array}{c} \pm (0.05\% + 0.05\% FS) \\ 0.1\Omega - 10\Omega \\ \end{array} $ 16b $ 0.01\% + 0.08S \\ 400' \\ 10m \\ \pm (0.2\% + 0.00\% + 0$	±(0.05%+0.1%FS) 10Ω-7.5KΩ iit 0.01%+0.0008S W W 2.2%FS) //Res:1 μS 0ppm 0.01~1 A/μS 0-150V 1mV .025%FS) 0-60A	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100μS-3600 10μS±1 0.001~0.05A/μS Measurin 0-18V 1 mV ±(0.025%+0	<4KΩ 1Ω 0.01%+0.0008S 100-600W 100mW 1%+0.8%FS S/Res:1 μS 00ppm 0.01~0.5A/μS 1g range 0~500V 10mV 0.025%FS) 0~30A	$0.05\Omega \sim 10\Omega$ 16l $0.01\% + 0.08S$ 2 600 10m \pm (0.2%+(100 μ S-3600 10 μ S-3	±(0.05%+0.1%FS) 10Ω-7.5KΩ it 0.01%+0.0008S W W W 1.2%FS) S /Res:1 μS 00ppm 0.01~1.6A/μS ≈ 60μ 0~120V 1mV 1.025%FS) 0~120A
mode namic de adback ttage adback	Range Resolution Accuracy Range Resolution Accuracy T1&T2 Accuracy Up/down slope Range Resolution Accuracy Range Resolution Accuracy Range Resolution Accuracy Range Resolution Accuracy	±(0.05%+0.05%FS) 0.1Ω~10Ω 16b 0.01%+0.08S 400 10m ±(0.2%+0 20μS~3600S 2μs+10 0.001~0.15A/μS 0~18V 0.1 mV ±(0.025%+0 0~6A 0.1mA	±(0.05%+0.1%FS) 10Ω-7.5KΩ it 0.01%+0.0008S W W 0.2%FS) //Res:1 μS Oppm 0.01~1 A/μS 0-150V 1mV .025%FS) 0~60A 1mA ±(0.05%+0.05%FS)	±(0.1%+0.1%FS) <100Ω 0.010 0.010 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100μS-3600 10μS± 0.001~0.05A/μS Measurin 0-18V 1 mV ±(0.025%+0	<4KΩ 1Ω 0.01%+0.0008S 100~600W 100mW 1%+0.8%FS S/Res:1 μS 00ppm 0.01~0.5A/μS 1g range 0~500V 10mV 0.025%FS) 0~30A 10mA	0.05Ω~10Ω 16l 0.01%+0.08S '2 6000 10m ± (0.2%+(100µS~3600 10µS±1 0.001~0.2A/µS ≈ 60µS 0-18V 0.1 mV ±(0.025%+(0~12A 1mA	$\pm (0.05\% + 0.1\% FS) \\ 10\Omega - 7.5K\Omega$ bit $0.01\% + 0.0008S$ W W W .2% FS) S //Res:1 μ S .20ppm $0.01 \sim 1.6A/\mu S \approx 60\mu$ 0 $\sim 120V$ 1mV .025% FS) $0 \sim 120A$ 10mA $\pm (0.05\% + 0.1\% FS)$
mode namic de adback ttage adback rrent adback	Range Resolution Accuracy Range Resolution Accuracy T18.T2 Accuracy Up/down slope Range Resolution Accuracy Range Resolution Accuracy Range Resolution Accuracy Range Resolution Accuracy Range	±(0.05%+0.05%FS) 0.1Ω~10Ω 16b 0.01%+0.08S 400 10m ±(0.2%+0 20μS~3600S 2μs+10 0.001~0.15A/μS 0-18V 0.1 mV ±(0.025%+0 0-6A 0.1mA ±(0.05%+0.05%FS)	±(0.05%+0.1%FS) 10Ω-7.5KΩ iit 0.01%+0.0008S W W 2.2%FS) (Res:1 μS 0ppm 0.01~1 A/μS 0-150V 1mV 0.025%FS) 0-60A 1mA ±(0.05%+0.05%FS) W	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100μS-3600 10μS±1 0.001~0.05A/μS Measurin 0-18V 1 mV ±(0.025%+0.000) 1 mA 0.194-0.1%FS 0-100W	<4KΩ 1Ω 0.01%+0.0008S 100-600W 100mW 1%+0.8%FS S/Res:1 μS 00ppm 0.01~0.5A/μS grange 0~500V 10mV 0.025%FS) 0~30A 10mA 0.2%+0.15%FS 100~600W	$\begin{array}{c} 0.05\Omega - 10\Omega \\ \\ 0.01\% + 0.08S & \\ \\ \hline \\ 0.01\% + 0.08S & \\ \\ \hline \\ 0.001\% + 0.08S & \\ \\ \hline \\ 0.001\% + 0.08\%$	±(0.05%+0.1%FS) 10Ω-7.5KΩ iit 0.01%+0.0008S W W 2.2%FS) 5/Res:1 μS 000ppm 0.01~1.6A/μS ≈ 60μ 0~120V 1mV 1.025%FS) 0~120A 10mA ±(0.05%+0.1%FS) W
mode namic de adback ttage adback rrent adback	Range Resolution Accuracy Range Resolution Accuracy T18T2 Accuracy Up/down slope Range Resolution Accuracy Range Resolution	±(0.05%+0.05%FS) 0.1Ω~10Ω 16b 0.01%+0.08S 400' 10m ±(0.2%+0 20μS~3600S 2μs+10 0.001~0.15A/μS 0-18V 0.1 mV ±(0.025%+0 0-6A 0.1mA ±(0.05%+0.05%FS) 400'	±(0.05%+0.1%FS) 10Ω-7.5KΩ iit 0.01%+0.0008S W W V.2%FS) i/Res:1 μS 0ppm 0.01~1 A/μS 0~150V 1mV 0.025%FS) 0~60A 1mA ±(0.05%+0.05%FS) W	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100µS-3600 10µS±1 0.001~0.05A/µS Measurin 0~18V 1 mV ±(0.025%+0.005%+0.005%) 1 mA 0.1%+0.1%FS 0-100W 1 mW	<4KΩ 1Ω 0.01%+0.0008S 100-600W 100mW 1%+0.8%FS S/Res:1 μS 00ppm 0.01~0.5A/μS 1g range 0-500V 10mV 0.025%FS) 0~30A 10mA 0.2%+0.15%FS 100-600W 100mW	$0.05\Omega \sim 10\Omega$ 161 $0.01\% + 0.08S$ 2 $0.01\% + 0.08S$ 3 $0.01\% + 0.08S$ 3 $0.001\% \sim 100\% \sim 100$	$ \pm (0.05\% + 0.1\% FS) \\ 10\Omega - 7.5K\Omega $ bit $ 0.01\% + 0.0008S $ W W W S /Res:1 μ S D0ppm $ 0.01 - 1.6A/\mu S \approx 60\mu $ $0 - 120V $ $10V $ 10
mode namic de adback ttage adback rrent adback	Range Resolution Accuracy Range Resolution Accuracy T18.T2 Accuracy Up/down slope Range Resolution Accuracy Range Resolution Accuracy Range Resolution Accuracy Range Resolution Accuracy Range	±(0.05%+0.05%FS) 0.1Ω~10Ω 16b 0.01%+0.08S 400 10m ±(0.2%+0 20μS~3600S 2μs+10 0.001~0.15A/μS 0-18V 0.1 mV ±(0.025%+0 0-6A 0.1mA ±(0.05%+0.05%FS)	±(0.05%+0.1%FS) 10Ω-7.5KΩ iit 0.01%+0.0008S W W V.2%FS) i/Res:1 μS 0ppm 0.01~1 A/μS 0~150V 1mV 0.025%FS) 0~60A 1mA ±(0.05%+0.05%FS) W	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100μS-3600 10μS±1 0.001~0.05A/μS Measurin 0-18V 1 mV ±(0.025%+0.1%FS 0-100W 1mW 1%+0.1%FS	<4KΩ 1Ω 0.01%+0.0008S 100-600W 100mW 1%+0.8%FS S/Res:1 μS 00ppm 0.01~0.5A/μS 1g range 0~500V 10mV 0.025%FS) 0~30A 10mA 0.2%+0.15%FS 100~600W 100mW	$\begin{array}{c} 0.05\Omega - 10\Omega \\ \\ 0.01\% + 0.08S & \\ \\ \hline \\ 0.01\% + 0.08S & \\ \\ \hline \\ 0.001\% + 0.08S & \\ \\ \hline \\ 0.001\% + 0.08\%$	$ \pm (0.05\% + 0.1\% FS) \\ 10\Omega - 7.5K\Omega $ bit $ 0.01\% + 0.0008S $ W W W S /Res:1 μ S D0ppm $ 0.01 - 1.6A/\mu S \approx 60\mu $ $0 - 120V $ $10V $ 10
namic namic adback Itage adback rrrent adback wer	Range Resolution Accuracy Range Resolution Accuracy T18.T2 Accuracy Up/down slope Range Resolution Accuracy	±(0.05%+0.05%FS) 0.1Ω~10Ω 16b 0.01%+0.08S 400 10m ±(0.2%+0 20μS~3600S 2μs+10 0.001~0.15A/μS 0-18V 0.1 mV ±(0.025%+0 0-6A 0.1mA ±(0.05%+0.05%FS) 400 10m ±(0.2%+0	±(0.05%+0.1%FS) 10Ω-7.5KΩ it 0.01%+0.0008S W W 1.2%FS) //Res:1 μS Oppm 0.01~1 A/μS 0-150V 1mV 1mV 1mA ±(0.05%+0.05%FS) W W 1.2%FS)	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100μS-3600 10μS±1 0.001~0.05A/μS Measurin 0-18V 1 mV ±(0.025%+0.000) 1 mA 0.1%+0.1%FS 0-100W 1 mW 1%+0.000	<4KΩ 1Ω 0.01%+0.0008S 100-600W 100mW 1%+0.8%FS S/Res:1 μS 00ppm 0.01~0.5A/μS grange 0~500V 10mV 0.025%FS) 0~30A 10mA 0.2%+0.15%FS 100-600W 19%FS d range	$\begin{array}{c} 0.05\Omega - 10\Omega \\ \\ 0.01\% + 0.08S & \\ \\ 0.01\% + 0.08S & \\ \\ 0.001\% + 0.08S & \\ \\ 0.001\% + $	±(0.05%+0.1%FS) 10Ω-7.5KΩ it 0.01%+0.0008S W W 0.2%FS) S/Res:1 μS 00ppm 0.01~1.6A/μS ≈ 60μ 0~120V 1mV 0.025%FS) 0~120A 10mA ±(0.05%+0.1%FS) W 0.2%FS)
namic namic adback ltage adback rrent adback wer	Range Resolution Accuracy Range Resolution Accuracy T18.T2 Accuracy Up/down slope Resolution Accuracy Range Resolution	±(0.05%+0.05%FS) 0.1Ω-10Ω 16b 0.01%+0.08S 400 10m ±(0.2%+0 20μS-3600S 2μs+10 0.001-0.15A/μS 0-18V 0.1 mV ±(0.025%+0 0-6A 0.1mA ±(0.05%+0.05%FS) 400' 10m ±(0.2%+0	±(0.05%+0.1%FS) 10Ω-7.5KΩ iit 0.01%+0.0008S W W V.2%FS) (Res:1 μS 0ppm 0.01~1 A/μS 0-150V 1mV 0.025%FS) 0-60A 1mA ±(0.05%+0.05%FS) W W V.2%FS)	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100µS-3600 10µS±1 0.001~0.05A/µS Measurin 0-18V 1 mV ±(0.025%+0.000) 1 mW	<4KΩ 1Ω 0.01%+0.0008S 100-600W 100mW 1%+0.8%FS S/Res:1 μS 00ppm 0.01~0.5A/μS grange 0~500V 10mV 0.025%FS) 0~30A 10mA 0.2%+0.15%FS 100~600W 100mW 1%FS d range	$\begin{array}{c} 0.05\Omega - 10\Omega \\ \\ 0.01\% + 0.08S ^{2} \\ \\ 600 \\ \\ 10m \\ \pm (0.2\% + (\\ 100\mu S - 3600 \\ \\ 10\mu S + 3600 \\ \\ 10\mu S + (\\ 10$	$\pm (0.05\%+0.1\%+S)$ $10\Omega-7.5K\Omega$ iit $0.01\%+0.0008S$ W W V 2.2%FS) S.Res:1 μS 0.007-1.6A/μS ≈ 60 100 1
namic ode adback ltage adback rrent adback wer er power prer current per curre	Range Resolution Accuracy Range Resolution Accuracy T1812 Accuracy Up/down slope Range Resolution Accuracy Roccuracy Range Resolution Accuracy Roccuracy Roccuracy Roccuracy Roccuracy Roccuracy	$ \begin{array}{c} \pm (0.05\% + 0.05\% FS) \\ 0.1\Omega - 10\Omega \\ \end{array} $ 16b $ 0.01\% + 0.08S \\ 400' \\ 10m \\ \pm (0.2\% + 0.08S) \\ 20\mu S - 3600S \\ 2\mu S + 10 \\ 0.001 - 0.15A/\mu S \\ \end{array} $ 0-18V $ 0.1 \text{ mV} \\ \pm (0.025\% + 0.016\% FS) \\ 400' \\ 10m \\ \pm (0.2\% + 0.025\% + 0.025\% FS) \\ 400' \\ 200 + $	±(0.05%+0.1%FS) 10Ω-7.5KΩ iit 0.01%+0.0008S W W W 2.2%FS) i/Res:1 μS 0ppm 0.01~1 A/μS 0~150V 1mV 0.025%FS) 0-60A 1mA ±(0.05%+0.05%FS) W W W 2.2%FS)	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100µS-3600 10µS±1 0.001~0.05A/µS Measurin 0-18V 1 mV ±(0.025%+0 0-3A 1 mA 0.1%+0.1%FS 0-100W 1mW 1%+0.2	<4KΩ 1Ω 0.01%+0.0008S 100-600W 100mW 1%+0.8%FS S/Res:1 μS 00ppm 0.01~0.5A/μS 1g range 0-500V 10mV 0.025%FS) 0-30A 10mA 0.2%+0.15%FS 100-600W 100mW 1%FS d range 20W ≈ 33A	0.05Ω~10Ω 16l 0.01%+0.08S 2 600 10m ± (0.2%+(100µS~3600 10µS±1 0.001~0.2A/µS ≈ 60µS 0~18V 0.1 mV ±(0.025%+(0~12A 1mA ±(0.05%+0.05%FS) 600 10m ±(0.2%+(0~13A	±(0.05%+0.1%FS) 10Ω-7.5KΩ it 0.01%+0.0008S W W 2.2%FS) S/Res:1 μS 000ppm 0.01~1.6A/μS ≈ 60μ 0~120V 1mV 0.025%FS) 0~120A 10mA ±(0.05%+0.1%FS) W W W 2.2%FS)
namic bde adback ltage adback wer er power prefer current per curr	Range Resolution Accuracy Range Resolution Accuracy T1812 Accuracy Up/down slope Range Resolution Accuracy Roccuracy Range Resolution Accuracy Roccuracy Roccuracy Roccuracy Roccuracy Roccuracy	±(0.05%+0.05%FS) 0.1Ω-10Ω 16b 0.01%+0.08S 400 10m ±(0.2%+0 20μS-3600S 2μs+10 0.001-0.15A/μS 0-18V 0.1 mV ±(0.025%+0 0-6A 0.1mA ±(0.05%+0.05%FS) 400' 10m ±(0.2%+0	±(0.05%+0.1%FS) 10Ω-7.5KΩ iit 0.01%+0.0008S W W W 2.2%FS) i/Res:1 μS 0ppm 0.01~1 A/μS 0~150V 1mV 0.025%FS) 0-60A 1mA ±(0.05%+0.05%FS) W W W 2.2%FS)	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100µS-3600 10µS±1 0.001~0.05A/µS Measurin 0-18V 1 mV ±(0.025%+0.000) 1 mW	<4KΩ 1Ω 0.01%+0.0008S 100-600W 100mW 1%+0.8%FS S/Res:1 μS 00ppm 0.01~0.5A/μS 1g range 0-500V 10mV 0.025%FS) 0-30A 10mA 0.2%+0.15%FS 100-600W 100mW 1%FS d range 20W ≈ 33A	$\begin{array}{c} 0.05\Omega - 10\Omega \\ \\ 0.01\% + 0.08S ^{2} \\ \\ 600 \\ \\ 10m \\ \pm (0.2\% + (\\ 100\mu S - 3600 \\ \\ 10\mu S + 3600 \\ \\ 10\mu S + (\\ 10$	±(0.05%+0.1%FS) 10Ω-7.5KΩ it 0.01%+0.0008S W W 2.2%FS) S/Res:1 μS 000ppm 0.01~1.6A/μS ≈ 60μ 0~120V 1mV 0.025%FS) 0~120A 10mA ±(0.05%+0.1%FS) W W W 2.2%FS)
namic ode adback Itage adback rrent adback wer er power pi er current per voltage p	Range Resolution Accuracy Range Resolution Accuracy T1812 Accuracy Up/down slope Range Resolution Accuracy Roccuracy Range Resolution Accuracy Roccuracy Roccuracy Roccuracy Roccuracy Roccuracy	$ \begin{array}{c} \pm (0.05\% + 0.05\% FS) \\ 0.1\Omega - 10\Omega \\ \end{array} $ 16b $ 0.01\% + 0.08S \\ 400' \\ 10m \\ \pm (0.2\% + 0.08S) \\ 20\mu S - 3600S \\ 2\mu S + 10 \\ 0.001 - 0.15A/\mu S \\ \end{array} $ 0-18V $ 0.1 \text{ mV} \\ \pm (0.025\% + 0.016\% FS) \\ 400' \\ 10m \\ \pm (0.2\% + 0.025\% + 0.025\% FS) \\ 400' \\ 200 + $	±(0.05%+0.1%FS) 10Ω-7.5KΩ it 0.01%+0.0008S W W 2.2%FS) //Res:1 μS 0ppm 0.01~1 A/μS 0-150V 1mV .025%FS) 0-60A 1mA ±(0.05%+0.05%FS) W W 2.2%FS) 0W ≈66A	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100µS-3600 10µS±1 0.001~0.05A/µS Measurin 0-18V 1 mV ±(0.025%+0 0-3A 1 mA 0.1%+0.1%FS 0-100W 1mW 1%+0.2	<4KΩ 1Ω 0.01%+0.0008S 100-600W 100mW 1%+0.8%FS S/Res:1 μS 00ppm 0.01~0.5A/μS 1g range 0~500V 10mV 0.025%FS) 0~30A 10mA 0.2%+0.15%FS 100-600W 100mW 1%FS d range 20W ≈ 33A	0.05Ω~10Ω 16l 0.01%+0.08S 2 600 10m ± (0.2%+(100µS~3600 10µS±1 0.001~0.2A/µS ≈ 60µS 0~18V 0.1 mV ±(0.025%+(0~12A 1mA ±(0.05%+0.05%FS) 600 10m ±(0.2%+(0~13A	±(0.05%+0.1%FS) 10Ω-7.5KΩ it 0.01%+0.0008S W W 2.2%FS) 5./Res:1 μS 00ppm 0.01~1.6A/μS ≈ 60, 0~120V 1mV 0.025%FS) 0~120A 10mA ±(0.05%+0.1%FS) W W 2.2%FS)
namic ode adback Itage adback rrent adback wer er power pi er current per voltage p	Range Resolution Accuracy Range Resolution Accuracy T18T2 Accuracy Up/down slope Range Resolution Accuracy	±(0.05%+0.05%FS) 0.1Ω-10Ω 16b 0.01%+0.08S 400 10m ±(0.2%+0 20μS-3600S 2μs+10 0.001~0.15A/μS 0-18V 0.1 mV ±(0.025%+0 0-6A 0.1mA ±(0.05%+0.05%FS) 400 10m ±(0.2%+0	±(0.05%+0.1%FS) 10Ω-7.5KΩ it 0.01%+0.0008S W W 2.2%FS) //Res:1 μS 0ppm 0.01~1 A/μS 0-150V 1mV .025%FS) 0-60A 1mA ±(0.05%+0.05%FS) W W 2.2%FS) 0W ≈66A	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100µS-3600 10µS±1 0.001~0.05A/µS Measurin 0-18V 1 mV ±(0.025%+0.05%+0.1%FS 0-100W 1mW 1%+0.1%FS 0-100W 1mW 1%+0. Protecte ≈62 ≈3.3A	<4KΩ 1Ω 0.01%+0.0008S 100-600W 100mW 1%+0.8%FS S/Res:1 μS 00ppm 0.01~0.5A/μS gg range 0~500V 10mV 0.025%FS) 0~30A 10mA 0.2%+0.15%FS 100-600W 100mW 1%FS d range 20W ≈ 33A	0.05Ω~10Ω 168 0.01%+0.08S 2 600 10m ± (0.2%+(100µS~3600 10µS±1 0.001~0.2A/µS≈60µS 0~18V 0.1 mV ±(0.025%+(0~12A 1mA ±(0.05%+0.05%FS) 600 10m ±(0.2%+(0~13A) ≈ 62 ≈ 13A	±(0.05%+0.1%FS) 10Ω-7.5KΩ it 0.01%+0.0008S W W 2.2%FS) 5./Res:1 μS 00ppm 0.01~1.6A/μS ≈ 60, 0~120V 1mV 0.025%FS) 0~120A 10mA ±(0.05%+0.1%FS) W W 2.2%FS)
namic ode adback Itage adback rrent adback wer er power pi er current per voltage p	Range Resolution Accuracy Range Resolution Accuracy T18.T2 Accuracy Up/down slope Range Resolution Accuracy Rotection Torotection Torotection Ture protection	±(0.05%+0.05%FS) 0.1Ω-10Ω 16b 0.01%+0.08S 400 10m ±(0.2%+0 20µS-3600S 2µs+10 0.001~0.15A/µS 0-18V 0.1 mV ±(0.025%+0 0.1mA ±(0.05%+0.05%FS) 400 10m ±(0.2%+0	±(0.05%+0.1%FS) 10Ω-7.5KΩ iit 0.01%+0.0008S W W 2.2%FS) //Res:1 μS 0ppm 0.01~1 A/μS 0~150V 1mV .025%FS) 0~60A 1mA ±(0.05%+0.05%FS) W W 2.2%FS) 0W ≈ 66A	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100µS-3600 10µS±1 0.001~0.05A/µS Measurir 0-18V 1 mV ±(0.025%+0 0-3A 1 mA 0.1%+0.1%FS 0-100W 1mW 1%+0.0	<4KΩ 1Ω 0.01%+0.0008S 100-600W 100mW 1%+0.8%FS S/Res:1 μS 00ppm 0.01~0.5A/μS gg range 0~500V 10mV 0.025%FS) 0~30A 10mA 0.2%+0.15%FS 100-600W 100mW 1%FS d range 20W ≈ 33A 30V 5°C cation	$0.05\Omega - 10\Omega$ 161 $0.01\% + 0.08S$ 2 600 10m \pm (0.2%+(100µS-3600 10µS±1 0.001~0.2A/µS ≈ 60µS 0~18V 0.1 mV \pm (0.025%+(0~12A 1mA \pm (0.05%+0.05%FS) 600 10m \pm (0.2%+(\pm 2.2%+(\pm 3.34 \pm 3.13A \pm 2.12 \pm 9.5	±(0.05%+0.1%FS) 10Ω-7.5KΩ iit 0.01%+0.0008S W W V 2.2%FS) S/Res:1 μS 00ppm 0.01~1.6A/μS ≈ 60μ 0~120V 1mV 0.025%FS) 0~120A 10mA ±(0.05%+0.1%FS) W W V V V V V V V V V V V V V V V V V
namic de adback Itage adback rrent adback wer er power pri er current per curr	Range Resolution Accuracy Range Resolution Accuracy T1812 Accuracy Up/down slope Range Resolution Accuracy Rorotection Corotection Corotection CCC	±(0.05%+0.05%FS) 0.1Ω-10Ω 16b 0.01%+0.08S 400 10m ±(0.2%+0 20μS-3600S 2μs+10 0.001~0.15A/μS 0-18V 0.1 mV ±(0.025%+0 0-6A 0.1mA ±(0.05%+0.05%FS) 400 10m ±(0.2%+0 0-6A 0.4 mA 200.25%+0 0-6A 0.5 mA 0.6 mA 0.6 mA 0.6 mA 0.6 mA 0.7 mA 0.7 mA 0.7 mA 0.7 mA 0.7 mA 0.8 mA 0.	±(0.05%+0.1%FS) 10Ω-7.5KΩ iit 0.01%+0.0008S W W 2.2%FS) i/Res:1 μS 0ppm 0.01~1 A/μS 0~150V 1mV 0.025%FS) 4(0.05%+0.05%FS) W W W 2.2%FS) 0-60A 2.2%FS) 0-60A 3.2%FS) 0-60A 2.2%FS) 0-60A 2.2%FS) 0-60A 2.2%FS) 0-60A 2.2%FS) 0-60A 2.2%FS)	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100µS-3600 10µS±1 0.001~0.05A/µS Measurin 0~18V 1 mV ±(0.025%+0.05%+0.00%) 1 mW 1 mW 1 %+0.1%FS 0~100W 1 mW 1 1%+0.1%FS 0~100W 1 mW 2 5%+0.1%FS 0~100W 1 mW 2 5%+0.1%FS 0~100W 1 mW 3 5%+0.1%FS 0~100W 1 mW 5 6%+0.1%FS 0~100W 1 mW 5 7000W 1 mW 5 7000W 1 mW 5 8% 5 8% 5 8% 5 8% 5 960 ff	<4KΩ 1Ω 0.01%+0.0008S 100-600W 100mW 1%+0.8%FS S/Res:1 μS 00ppm 0.01~0.5A/μS ig range 0-500V 10mV 0.025%FS) 0-30A 10mA 0.2%+0.15%FS 100-600W 100mW 1%FS d range 20W ≈ 33A 30V ≈ 33A	0.05Ω-10Ω 16l 0.01%+0.08S 2 600 10m ± (0.2%+(100µS-3600 10µS±1 0.001-0.2A/µS ≈ 60µS 0-18V 0.1 mV ±(0.025%+(0-12A 1mA ±(0.05%+0.05%FS) 600 10m ±(0.2%+(0-13A 2 ≈ 13A 2 ≈ 13A 2 ≈ 13A 2 ≈ 13/12A	±(0.05%+0.1%FS) 10Ω-7.5KΩ iit 0.01%+0.0008S W W 22%FS) S/Res:1 μS 000ppm 0.01~1.6A/μS ≈ 60μ 0~120V 1mV 0.025%FS) 0~120A 10mA ±(0.05%+0.1%FS) W W 2.2%FS) 00W ≈ 130A
mode namic de adback ttage adback rrent adback wer er power pr er current per	Range Resolution Accuracy Range Resolution Accuracy T18T2 Accuracy Up/down slope Range Resolution Accuracy Cortection Cortection Cortection CCC CV	±(0.05%+0.05%FS) 0.1Ω-10Ω 16b 0.01%+0.08S 400 10m ±(0.2%+0 20μS-3600S 2μs+10 0.001~0.15A/μS 0-18V 0.1 mV ±(0.025%+0 0-6A 0.1mA ±(0.05%+0.05%FS) 400 10m ±(0.2%+0 ≈ 42 ≈ 6.6A ≈ 16 ≈ 85	±(0.05%+0.1%FS) 10Ω-7.5KΩ it 0.01%+0.0008S W W 2.2%FS) //Res:1 μS 0ppm 0.01~1 A/μS 0-150V 1mV .025%FS) 0-60A 1mA ±(0.05%+0.05%FS) W W 2.2%FS) OW ≈ 66A	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100µS-3600 10µS±1 0.001~0.05A/µS Measurin 0-18V 1 mV ±(0.025%+0.05%+0.05%+0.00%) 1 mW 1%+0.1%FS 0-100W 1 mW 1%+0.1%FS 0-100W 1 mW 1%+0.000 mW 1 mW 1%+0.000 mW 1	<4KΩ 1Ω 0.01%+0.0008S 100-600W 100mW 1%+0.8%FS S/Res:1 μS 00ppm 0.01~0.5A/μS 1g range 0~500V 10mV 0.025%FS) 0~30A 10mA 0.2%+0.15%FS 100-600W 100mW 1%FS d range 20W ≈ 33A 30V 5°C cation ≈ 33/30A	0.05Ω-10Ω 16l 0.01%+0.08S 2 600 10m ± (0.2%+(100µS-3600 10µS±1 0.001~0.2A/µS ≈ 60µS 0-18V 0.1 mV ±(0.025%+(0-12A 1mA ±(0.05%+0.05%FS) 600 10m ±(0.2%+(≈ 13A ≈ 12 ≈ 95	±(0.05%+0.1%FS) 10Ω-7.5KΩ it 0.01%+0.0008S W W 2.2%FS) 5./Res:1 μS 00ppm 0.01~1.6A/μS ≈ 60μ 0~120V 1mV .025%FS) 0~120A 10mA ±(0.05%+0.1%FS) W W 2.2%FS) 00W ≈ 130A
mode namic de adback Itage adback rrent adback wer er power pr er current p er current p er temperat	Range Resolution Accuracy Range Resolution Accuracy T18.T2 Accuracy Up/down slope Range Resolution Accuracy Range Resolution Accuracy Range Resolution Accuracy Range Resolution Accuracy Couracy Range Resolution Accuracy Range Resolution Accuracy Couracy Cotection Cotection Cotection Cotection Cotection CCC CV CR	±(0.05%+0.05%FS) 0.1Ω-10Ω 16b 0.01%+0.08S 400 10m ±(0.2%+0 20μS-3600S 2μs+10 0.001~0.15A/μS 0-18V 0.1 mV ±(0.025%+0 0-6A 0.1mA ±(0.05%+0.05%FS) 400 10m ±(0.2%+0 242 ≈ 6.6A ≈ 16 ≈ 85 ≈ 6.6/6A ≈ 0 ≈ 30	±(0.05%+0.1%FS) 10Ω-7.5KΩ it 0.01%+0.0008S W W 1.2%FS) // Res:1 μS Oppm 0.01~1 A/μS 0-150V 1mV 1mV 1.025%FS) W W 2.2%FS) W W 2.2%FS) O=60A 1mA ±(0.05%+0.05%FS) W W 2.2%FS) OW ≈ 66A	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100µS-3600 10µS±1 0.001~0.05A/µS Measurin 0-18V 1 mV ±(0.025%+0 0-3A 1 mA 0.1%+0.1%FS 0-100W 1mW 1%+0. Protecte ≈62 ≈3.3A ≈55 ≈88 Specifi ≈3.3/3A ≈ ≈10	<4KΩ 1Ω 0.01%+0.0008S 100-600W 100mW 1%+0.8%FS S/Res:1 μS 00ppm 0.01~0.5A/μS gg range 0~500V 10mV 0.025%FS) 0~30A 10mA 0.2%+0.15%FS 100-600W 100mW 1%FS d range 20W ≈ 33A 30V 5°C cation ≈ 33/30A 0V 0mΩ	$0.05\Omega - 10\Omega$ 161 $0.01\% + 0.08S^2$ 600 $10m$ $\pm (0.2\% + (10)\mu S - 300$ $10\mu S - 300$	±(0.05%+0.1%FS) 10Ω-7.5KΩ it 0.01%+0.0008S W W 0.2%FS) S/Res:1 μS 00ppm 0.01~1.6A/μS ≈ 60μ 0~120V 1mV 0.025%FS) 0~120A 10mA ±(0.05%+0.1%FS) W W 0.2%FS) 0W ≈ 130A
rnamic bde rnamic bde rnamic bde rnamic bde rnamic bde rnamic beadback rnent beadback rrrent rer power prer current previous present	Range Resolution Accuracy Range Resolution Accuracy T18T2 Accuracy Up/down slope Range Resolution Accuracy Cortection Cortection Cortection CCC CV	±(0.05%+0.05%FS) 0.1Ω-10Ω 16b 0.01%+0.08S 400 10m ±(0.2%+0 20μS-3600S 2μs+10 0.001~0.15A/μS 0-18V 0.1 mV ±(0.025%+0 0-6A 0.1mA ±(0.05%+0.05%FS) 400 10m ±(0.2%+0 ≈ 42 ≈ 6.6A ≈ 16 ≈ 85	±(0.05%+0.1%FS) 10Ω-7.5KΩ idt 0.01%+0.0008S W W V.2%FS) //Res:1 μS Oppm 0.01~1 A/μS 0~150V 1mV .0.25%FS) 0~60A 1mA ±(0.05%+0.05%FS) W W V.2%FS) 0W ≈ 66A	±(0.1%+0.1%FS) <100Ω 0.01Ω 0.01%+0.08S 0-100W 1mW 1%+0.3%FS 100µS-3600 10µS±1 0.001~0.05A/µS Measurin 0-18V 1 mV ±(0.025%+0.05%+0.05%+0.00%) 1 mW 1%+0.1%FS 0-100W 1 mW 1%+0.1%FS 0-100W 1 mW 1%+0.000 mW 1 mW 1%+0.000 mW 1	<4KΩ 1Ω 0.01%+0.0008S 100-600W 100mW 1%+0.8%FS S/Res:1 μS 00ppm 0.01~0.5A/μS grange 0~500V 10mV 0.025%FS) 0~30A 10mA 0.2%+0.15%FS 100-600W 100mW 1%FS drange 20W ≈ 33A 30V 5°C cation ≈ 33/30A 0V 0mΩ MΩ	0.05Ω-10Ω 16l 0.01%+0.08S 2 600 10m ± (0.2%+(100µS-3600 10µS±1 0.001~0.2A/µS ≈ 60µS 0-18V 0.1 mV ±(0.025%+(0-12A 1mA ±(0.05%+0.05%FS) 600 10m ±(0.2%+(≈ 13A ≈ 12 ≈ 95	±(0.05%+0.1%FS) 10Ω~7.5KΩ int 0.01%+0.0008S W W W 0.2%FS) S/Res:1 μS 00ppm 0.01~1.6A/μS ≈ 60μ 0~120V 1mV 0.025%FS) 0~120A 10mA ±(0.05%+0.1%FS) W W W W W W W W W 0.2%FS) 000 ≈ 130A

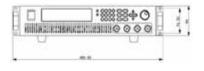
IT8500+ Specifications

	•	170	110				100	
	_	IT8514C+		IT8514B+		IT8516C+		
	Voltage	0~120V			0~500V		0~120V	
Rated	Current	0~24A	0~240A	0~6A	0~60A	0~24A	0~240A	
(0∼40 °C)	Power		OOW	1500 W		3000W		
	MOV	0.25V at 24A	2.5V at 240A	0.25V at 6A	2.5V at 60A	0.15V at 24A	1.5V at 240A	
	Range	18V	120V	0.1~50V	0.1~500V	0.1~18V	0.1~120V	
CV mode	Resolution	1mV	10mV	1mV	10mV	1mV	10mV	
	Accuracy	±(0.05%+0.02%FS)	±(0.05%+0.025%FS)	±(0.05%+0.02%FS)	±(0.05%+0.025%FS)	±(0.05%+0.02%FS)	±(0.05%+0.025%FS	
CC mode	Range	0~24A	0~240A	0~6A	0~60A	0~24A	0~240A	
	Resolution	1mA	10mA	1mA	10mA	1mA	10mA	
	Accuracy	±(0.1%+0.1%FS)	±(0.1%+0.1%FS)	±(0.05%+0.05%FS)	±(0.05%+0.05%FS)	±(0.1%+0.1%FS)	±(0.1%+0.1%FS)	
	Range	0.05Ω~10Ω	10Ω~7.5KΩ	0.05Ω~10Ω	10Ω~7.5KΩ	0.05Ω~10Ω	10Ω~7.5KΩ	
CR mode	Resolution	16bit		16bit		16bit		
	Accuracy	0.02%+0.08\$	0.01%+0.0008S	0.02%+0.08S *2	0.02%+0.0008S	0.02%+0.08S *2	0.02%+0.0008S	
	Range	1500W		1500W		3000W		
CP mode	Resolution	10mW		·	10mW		10mW	
	Accuracy	± (0.2%-	,	± (0.2%+0.2%FS)		± (0.2%+0.2%FS)		
Dynamic	T1&T2	100µS~360	0S /Res:3 μS	100µS~360	100μS~3600S /Res:1 μS		120μS~3600S /Res:1 μS	
mode	Accuracy		100ppm		100ppm		100ppm	
mode	Up/down slope	0.001~0.3A/μS	0.01~3.2A/μS	0.001~0.15A/μS ≈ 60μS	0.01~0.8A/μS ≈ 60μS	0.001~0.3A/μS ≈ 70μS	0.01~2.8A/μS ≈ 70μ	
	1-				ing range			
Readback	Range	0~18V	0~120V	0~50V	0~500V	0~18V	0~120V	
Voltage	Resolution	0.1 mV	1mV	0.1 mV	1mV	0.1 mV	1mV	
Vollage	Accuracy		-0.025%FS)	±(0.025%+0.025%FS)		±(0.025%+0.025%FS)		
Readback	Range	0~24A	0~240A	0~6A	0~60A	0~24A	0~240A	
	Resolution	1mA	10mA	1mA	10mA	1mA	10mA	
Current	Accuracy	±(0.05%+0.05%FS)		±(0.05%+0.05%FS)		±(0.1%+0.1%FS)		
Readback	Range		ioW	1500W		3000W		
	Resolution	10mW		10mW		10mW		
Power	Accuracy	±(0.2%+0.2%FS)		±(0.2%+0.2%FS)		±(0.2%+0.2%FS)		
					ed range			
Over power p			500W		550W		050W	
Over current		≈ 26.7A	≈ 26.7A	≈ 6.7A	≈ 67A	≈ 26A	≈ 260A	
Over voltage protection		≈ 125V		≈530V		≈ 125V		
Over tempera	ature protection	≈ !	35°C		35°C	≈8	35°C	
					fication			
	CC	≈ 13/12A	≈ 130/120A	≈ 6.7/6A	≈ 67/60A	≈ 26/24A	≈ 260/240A	
Short circuit	CV		0V		≈ 0V		≈ 0V	
	CR		5m $Ω$		≈30mΩ		ōmΩ	
Input terminal impedance		150ΜΩ			150ΚΩ		150ΚΩ	
Size(W*H*D)		214.5mmW*354.6mmD*88.4mmH		436.5mm*88.2mm*463.5mm		436.5mm*176mm*463.5mm		

 $[\]ensuremath{^\star}$ This information is subject to change without notice

*2 Resistance readback range: ($1/(1/R+(1/R)^*0.01\%+0.08), 1/(1/R-(1/R)^*0.01\%-0.08)$) IT8514B+/14C+/16C+: (1/(1/R+(1/R)*0.02%+0.08),1/(1/R-(1/R)*0.02%-0.08))

IT8514B+/IT8514C+ Dimension figure



unit: mm



