

Parameter		Model:IT8512G+	
Rated value	Voltage	0.1~18V	0.1~150V
	Current	0~3A	0~30A
	Power	0~300W	
	Resistance	0.05Ω~7500Ω	
	Minimum resistance	≒40mΩ	
	Minimum operating voltage	0.12V at 3A	1.2V at 30A
	Input leakage Current	0.07mA	0.7mA
Setup Resolution	Voltage	1mV	10mV
	Current	0.1mA	1mA
	Power	10mW	
	Resistance	16bit	
Read Back Resolution	Voltage	0.1 mV	10 mV
	Current	0.1mA	1mA
	Power	10mW	
Setup Accuracy	Voltage	±(0.05%+0.02%FS)	±(0.05%+0.025%FS)
	Current	±(0.05%+0.05%FS)	±(0.05%+0.05%FS)
	Power*3	0.1%+0.2%FS	
	Resistance*1	0.01%+0.08S *2	0.01%+0.0008S
Read Back Accuracy	Voltage	±(0.025%+0.025%FS)	
	Current	±(0.05%+0.05%FS)	
	Power	±(0.1%+0.2%FS)	
Setup Temperature Coefficient (% of Output/°C +Offset)	Voltage	≤100ppm/°C + 100ppm/°C*FS	
	Current	≤100ppm/°C + 100ppm/°C*FS	
Read Back Temperature Coefficient (% of Output/°C +Offset)	Voltage	≤100ppm/°C + 100ppm/°C*FS	
	Current	≤100ppm/°C + 100ppm/°C*FS	
Transient Response Time	Ascenting rate*4	0.0001~0.2A/uS	0.001~1.5A/uS
	Descending rate*4	0.0001~0.2A/uS	0.001~1.5A/uS

	Transient Frequency	0.001~20KHz
AC Input	voltage range	110V ±10% or 220V ±10%
		No three phase
	Frequency Range	50/60Hz
	Maximum current	0.3A
	Power factor	0.8
	Harmonic THDI	None
	Island Protection	None
Setup Stability-30min (%of Output +Offset)	Voltage	≤0.05%+0.025%FS
	Current	≤0.05%+0.05%FS
Setup stability-8h (%of Output +Offset)	Voltage	≤0.05%+0.025%FS
	Current	≤0.05%+0.05%FS
Readback Stability-30min (%of Output +Offset)	Voltage	≤0.025%+0.025%FS
	Current	≤0.05%+0.05%FS
Readback stability-8h (%of Output +Offset)	Voltage	≤0.025%+0.025%FS
	Current	≤0.05%+0.05%FS
Efficiency	None	
Remote Sense Compensation Voltage	≤2V	
Command Response Time	The fastest 5mS	
Storage Temperature	-20°C~70°C	
Protective Function	OPP ≅320W, OCP ≅3.3A 33A, OVP ≅160V, OTP ≅85°C	
Standard Interface	Standard: USB (support VCP, TMC),LAN	
Isolation (output to ground)	500V/DC/1mA	
Isolation (input to ground)	1.5KV/AC/5mA	
Number of parallel machines	Does not support paralleling (supports 16 groups of multi-channels)	
Protection level	IP20	

Safety rules	None
Cooling method	Air-cooled
Fuse specifications	0.5A
Working Temperature	0~40°C
Dimension (mm)	214.5mm*88.2mm*354.6mm
Weight(net)	3.4 kg

- *1 The voltage/current input is no less than 10% FS
- *2 The scope of read-back resistance is: $(1/(1/R+(1/R)*0.01\%+0.08), 1/(1/R-(1/R)*0.01\%-0.08))$
- *3 The voltage/current input is no less than 10% FS
- *4 Ascending/descending slope: 10%-90% current ascending slope from 0 to maximum current.
- *5 Minimum rise time: 10%-90% current rise time