

Chapter4 Specification

4.1 Specification

Parameter		IT6121B	IT6122B	IT6123B	IT6132B	IT6133B
Output Ratings	voltage	0-20V	0-32V	0-72V	0-30V	0-60V
	current	0-5A	0-3A	0-1.2A	0-5A	0-2.5A
	power	100W	96W	86.4W	150W	150W
Line regulation	voltage	<0.01%+1mV	<0.01%+1mV	<0.01%+1mV	<0.01%+1mV	<0.01%+2mV
	current	<0.05%+1mA	<0.05%+1mA	<0.05%+1mA	<0.05%+1mA	<0.05%+0.05mA
Load regulation	voltage	<0.01%+2mV				
	current	<0.05%+0.1mA	<0.05%+0.1mA	<0.05%+0.1mA	<0.05%+1.5mA	<0.05%+0.5mA
Ripple&Noise (20HZ-7MHZ)	voltage	<1mv Vrms	<1mv Vrms	<1mv Vrms	<1mv Vrms	<1mv Vrms
		<3mv Vpp	<3mv Vpp	<4mv Vpp	<4mv Vpp	<5mv Vpp
	current	<3mA rms	<3mA rms	<3mA rms	<4mA rms	<3mA rms
Setup resolution	voltage	1mV	1mV	1mV	1mV	1mV
	current	0.1mA				
Setup accuracy	Voltage	±0.03%+3mV	±0.03%+3mV	±0.03%+6mV	±0.03%+3mV	±0.03%+6mV
	Current	±0.05%+2mA	±0.05%+2mA	±0.05%+1mA	±0.05%+2.5mA	±0.05%+1.5mA
Readback resolution	Voltage	0.1mV	0.1mV	0.1mV	0.1mV	0.1mV
	current	0.01mA	0.01mA	0.01mA	0.01mA	0.01mA
Readback accuracy	Voltage	±0.02%+3mV	±0.02%+3mV	±0.02%+5mV	±0.02%+3mV	±0.02%+5mV
	Current	±0.05%+2mA	±0.05%+2mA	±0.05%+1mA	±0.05%+2.5mA	±0.05%+1.5mA
Response time						
Response time		<200uS	<200uS	<200uS	<200uS	<200uS
Rising time (From 10%-90%FS)		<20mS	<20mS	<20mS	<20mS	<20mS
Falling time (From 90%-10%FS)		<200mS	<150mS	<150mS	<250mS	<200mS
OVP	Range	1-19V	1-31V	1-71V	1-29V	1-59V
	accuracy	±(setting value*0.5%+0.5V)				
	Response time	<10mS				

DVM(DC)	
Readback accuracy	$\pm 0.02\% + 10\text{mV}$
Readback resolution	$0.1\text{mV} (< 10\text{V}) ; 1\text{mV} (> 10\text{V})$
Difference-mode voltage	0-40Vpk
Common-mode voltage	0-30Vpk
Common-mode rejection ratio	$< 0.1\%$
Weight(net)	7Kg

Parameter		IT6162B
Rated value (0 °C-40 °C)	Voltage	0-20V
	Current	0-50A
	Power	1000W
Load regulation \pm (%of Output+Offset)	Voltage	$\leq 0.01\% + 10\text{mV}$
	Current	$\leq 0.1\% + 10\text{mA}$
Line regulation \pm (%of Output+Offset)	Voltage	$\leq 0.02\% + 2\text{mV}$
	Current	$\leq 0.1\% + 2\text{mA}$
Setup resolution	Voltage	1mV
	Current	1mA
Readback resolution	Voltage	1mV
	Current	1mA
Setup accuracy (Within twelve months 25°C \pm 5°C) \pm (%of Output+Offset)	Voltage	$\leq 0.02\% + 2\text{mV}$
	Current	$\leq 0.1\% + 25\text{mA}$
Readback accuracy (Within twelve months 25°C \pm 5°C) \pm (%of Output+Offset)	Voltage	$\leq 0.02\% + 2\text{mV}$
	Current	$\leq 0.05\% + 15\text{mA}$
Ripple (20Hz -20MHz)	Voltage	$\leq 4\text{mVp-p} / 1.2\text{mV rms}$
	Current	$\leq 15\text{mA rms}$
Tem coefficient (%of Output/°C+Offset)	Voltage	$0.01\% + 2\text{mV}$
	Current	$0.01\% + 20\text{mA}$
Readback Tem coefficient (%of Output/°C+Offset)	Voltage	$0.01\% + 2\text{mV}$
	Current	$0.01\% + 15\text{mA}$
Rising Time at no load	Voltage	$\leq 1\text{mS}$
Rising time at full load	Voltage	$\leq 1\text{mS}$
Falling time at no load	Voltage	$\leq 50\text{mS}$
Falling time at full load	Voltage	$\leq 1\text{mS}$
Dynamic response time		$\leq 200\mu\text{S}$
AC input	Voltage1	$110\text{V} \pm 10\%$
	Voltage2	$120\text{V} \pm 10\%$
	Voltage3	$220\text{V} \pm 10\%$
	Voltage4	$230\text{V} \pm 10\%$
	Frequency	47HZ-63HZ
Setup stability -30min (%of Output +Offset)	Voltage	$0.01\% + 2\text{mV}$
	Current	$0.1\% + 20\text{mA}$
Setup stability -8h (%of Output +Offset)	Voltage	$0.015\% + 2\text{mV}$
	Current	$0.15\% + 20\text{mA}$
Readback stability-30min (%of Output +Offset)	Voltage	$0.01\% + 2\text{mV}$
	Current	$0.1\% + 20\text{mA}$
Readback stability -8h (%of Output +Offset)	Voltage	$0.015\% + 2\text{mV}$
	Current	$0.15\% + 20\text{mA}$
Fuse specification		10A (Voltage3, 4) / 20A (Voltage1, 2)

Remote sense compensation	1V
Programming response time	20mS (AVG)
Power factor	0.7Max
Maximum input current	20A
Maximum input apparent power	2400VA
Storage temperature	-10°C~70°C
Protect function	OVP/OCP/OTP
Communication Interface	GPIO/USB/RS232
Withstand voltage(output to the ground)	200V
Operating temperature	0~40°C
Dimension (mm)	483mmW*88.4mmH*664.1mmD
Weight (Kg)	30Kg
DVM	
Display accuracy	Low Range (0 ~±5.5V) ≤±1.5mV
	High Range (0 ~±40V) ≤0.02%±3mV
Display Temp.coefficient (% of Input/°C +Offset)	0.02%+2 mV
Display stability -30min (% of Output +Offset)	0.02%+2 mV
Display stability -8 h (% of Output +Offset)	0.02%+2.5 mV
Measurement range	-40V - +40V
Input Common-mode voltage	< 200Vdc

Parameter		IT6164B	
Rated value (0 °C-40 °C)	Voltage	0-30V	0-60V
	Current	0-40A	0-20A
	Power	1200W	
Load regulation ±(%of Output+Offset)	Voltage	≤0.01%+10mV	
	Current	≤0.1%+10mA	
Line regulation ±(%of Output+Offset)	Voltage	≤0.02%+2mV	
	Current	≤0.1%+2mA	
Setup resolution	Voltage	1mV	
	Current	1mA	
Readback resolution	Voltage	1mV	
	Current	1mA	
Setup accuracy (Within twelve months 25°C±5°C) ±(%of Output+Offset)	Voltage	≤0.02%+6mV	
	Current	≤0.1%+15mA	
Readback accuracy (Within twelve months 25°C±5°C) ±(%of Output+Offset)	Voltage	≤0.02%+6mV	
	Current	≤0.05%+15mA	
Ripple (20Hz -20MHz)	Voltage	≤ 5mVp-p / 1.2 mV rms	
	Current	≤15mArms	
Tem coefficient (%of Output/°C+Offset)	Voltage	0.01%+2mV	
	Current	0.01%+20mA	
Readback Tem coefficient	Voltage	0.01%+2mV	

(%of Output/°C+Offset)	Current	0.01%+15mA	
Rising Time at no load	Voltage	$\leq 1\text{mS}^1$	$\leq 2\text{mS}^1$
Rising time at full load	Voltage	$\leq 1\text{mS}^1$	$\leq 2\text{mS}^1$
Falling time at no load	Voltage	$\leq 50\text{mS}^1$	$\leq 120\text{mS}^1$
Falling time at full load	Voltage	$\leq 1\text{mS}^1$	$\leq 2\text{mS}^1$
Dynamic response time		$\leq 200\text{uS}^2$	
AC input	Voltage	220V \pm 10%	
	Frequency	47HZ-63HZ	
Setup stability -30min (%of Output +Offset)	Voltage	0.01%+2mV	
	Current	0.1%+20mA	
Setup stability -8h (%of Output +Offset)	Voltage	0.015%+2mV	
	Current	0.15%+20mA	
Readback stability-30min (%of Output +Offset)	Voltage	0.01%+2mV	
	Current	0.1%+20mA	
Readback stability -8h (%of Output +Offset)	Voltage	0.015%+2mV	
	Current	0.15%+20mA	
Fuse specification		T 15A	
Remote sense compensation		1V	
Programming response time		20mS (AVG)	
Power factor		0.7Max	
Maximum input current		15A	
Maximum input apparent power		3000VA	
Storage temperature		-10°C~70°C	
Protect function		OVP/OCP/OTP	
Communication Interface		GPIB/USB/RS232	
Withstand voltage(output to the ground)		200Vdc	
Operating temperature		0~40°C	
Dimension (mm)		483mmW*88.4mmH*664.1mmD	
Weight (Kg)		30Kg	
DVM			
Display accuracy		Low Range (0 ~ \pm 5.5V)	$\leq \pm 1.5\text{mV}$
		High Range (0 ~ \pm 40V)	$\leq 0.02\% \pm 3\text{mV}$
Display Temp.coefficient (% of Input/°C +Offset)		0.02%+2 mV	
Display stability -30min (% of Output +Offset)		0.02%+2 mV	
Display stability -8 h (% of Output +Offset)		0.02%+2.5 mV	
Measurement range		-40V - +40V	
Input Common-mode voltage		< 200Vdc	

(*1) Indicates the interval at which the output waveform changes by 10% to 90%.

(*2) Indicates the interval at which the load changes 50-100% and the output voltage recovers to within 75 mV of the set value.

*The above specifications may be subject to change without prior notice.