

## Product Datasheet - Technical Specifications



More information in our Web-Shop at ► [www.meilhaus.com](http://www.meilhaus.com) and in our download section.

### Your contact

Technical and commercial sales, price information,  
quotations, demo/test equipment, consulting:

Tel.: **+49 - 81 41 - 52 71-0**

FAX: **+49 - 81 41 - 52 71-129**

E-Mail: [sales@meilhaus.com](mailto:sales@meilhaus.com)

Downloads:

[www.meilhaus.com/en/infos/download.htm](http://www.meilhaus.com/en/infos/download.htm)

**Meilhaus Electronic GmbH**  
Am Sonnenlicht 2  
82239 Alling/Germany

Tel. **+49 - 81 41 - 52 71-0**  
Fax **+49 - 81 41 - 52 71-129**  
E-Mail [sales@meilhaus.com](mailto:sales@meilhaus.com)

Mentioned company and product names may be registered trademarks of the respective companies. Prices in Euro plus VAT. Errors and omissions excepted.  
© Meilhaus Electronic.

**[www.meilhaus.de](http://www.meilhaus.de)**

# Chapter5 Specifications

## 5.1 Main technical parameters

IT8722 is double channels module which dynamically allocates power and the specification of each channel is the same.

Model		IT8722			
Rated value ( 0 ~ 40 °C )	Input voltage	0~80V			
	Input current	0~20A			
	Input power	250W *1			
	Min operation voltage	0.15V/3A	1.0V/20A		
CV mode	Range	0~18V	0~80V		
	Resolution	1mV	10mV		
	Accuracy	±(0.05%+0.025%FS)	±(0.05%+0.025%FS)		
CC mode	Range	0~3A	0~20A		
	Resolution	0.1mA	1mA		
	Accuracy	±(0.05%+0.05%FS)	±(0.05%+0.05%FS)		
CR mode *2	Range	0.05Ω~10Ω	10Ω~7.5KΩ		
	Resolution	16bit			
	Accuracy	0.01%+0.08S *3	0.01%+0.0008S		
CP mode *5	Range	250W *4			
	Resolution	10mW			
	Accuracy	±(0.2%+0.2%FS)			
Dynamic mode					
Dynamic mode	CC Mode				
	T1 & T2	20uS~3600S/Res:1uS			
	Accuracy	5uS±100ppm			
	Rising/falling slope *6	0.0001~0.2A/uS	0.001~1.6A/uS		
	Min Rising time *7	≈ 10uS	≈ 10uS		
Measuring range					
Readback voltage	Range	0~18V	0~80V		
	Resolution	0.1 mV	1 mV		
	Accuracy	±(0.025%+0.025%FS)	±(0.025%+0.025%FS)		
Readback current	Range	0~3A	0~20A		
	Resolution	0.01mA	0.1mA		
	Accuracy	±(0.05%+0.05%FS)			
Readback power	Range	250W			
	Resolution	10mW			
	Accuracy	±(0.2%+0.2%FS)			
Protection range					
OPP	≈ 250W				
OCP	≈ 3.3A	≈ 22A			
OVP	≈ 82V				
OTP	≈ 85°C				
Specification					
Short-circuit	Current ( CC )	≈ 3.3/3A	≈ 22/20A		
	Voltage ( CV )	0V			
	Resistance ( CR )	≈ 50mΩ			

<b>Input impedance</b>	300KΩ	
<b>dimension W*H*D (mm)</b>	82*183*573	
<b>weight</b>	5KG	

- \*1 Dynamically allocate power. The maximum power of single channel is 250W. The total power of both channels is less than or equal to 300W. The average power of each channel is 150W.
- \*2 The voltage/current input is no less than 10% FS (FS= Full Scale)
- \*3 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) )
- \*4 Dynamically allocate power. The maximum power of single channel is 250W. The total power of both channels is less than or equal to 300W.
- \*5 The voltage/current input is no less than 10% FS
- \*6 Ascending/descending slope: 10%-90% current ascending slope from 0 to maximum current
- \*7 Minimum rise time: 10%-90% current rise time

IT8723 is double channels module which dynamically allocates power and the specification of each channel is the same.

<b>Model</b>		<b>IT8723</b>			
<b>Rated value ( 0 ~ 40 °C )</b>	Input voltage	0~80V			
	Input current	0~45A			
	Input power	300W			
	Min operation voltage	0.14V at 4.5A	1.4V at 45A		
<b>CV mode</b>	Range	0~18V	0~80V		
	Resolution	1mV	10mV		
	Accuracy	±(0.05%+0.025%FS)	±(0.05%+0.025%FS)		
<b>CC mode</b>	Range	0~4.5A	0~45A		
	Resolution	0.1mA	1mA		
	Accuracy	±(0.05%+0.05%FS)	±(0.05%+0.05%FS)		
<b>CR mode *1</b>	Range	0.05Ω~10Ω	10Ω~7.5KΩ		
	Resolution	16bit			
	Accuracy	0.01%+0.08S *2	0.01%+0.0008S		
<b>CP mode *3</b>	Input voltage	300W			
	Input current	10mW			
	Input power	±(0.2%+0.2%FS)			
<b>Dynamic mode</b>					
<b>Dynamic mode</b>	CC mode				
	T1 & T2	20uS~3600S/Res:1uS			
	Accuracy	5uS+100ppm			
	Rising/falling slope *4	0.0001~0.25A/uS	0.001~2.5A/uS		
	Min Rising time *5	≈ 12uS	≈ 12uS		
<b>Measuring range</b>					
<b>Readback voltage</b>	Range	0~18V	0~80V		
	Resolution	0.1 mV	1 mV		
	Accuracy	±(0.025%+0.025%FS)	±(0.025%+0.025%FS)		
<b>Readback current</b>	Range	0~4.5A	0~45A		
	Resolution	0.1mA	1mA		
	Accuracy	±(0.05%+0.05%FS)			
<b>Readback power</b>	Range	300W			
	Resolution	10mV			
	Accuracy	±(0.2%+0.2%FS)			
<b>Protection range</b>					
<b>OPP</b>	≈ 310W				

OCP	≤5A	≤50A
OVP	≤82V	
OTP	≤85°C	
<b>Specification</b>		
<b>Short-circuit</b>	Current ( CC )	≤5/4.5A
	Voltage ( CV )	0V
	Resistance ( CR )	≤30mΩ
dimension	82*183*573mm	
Weight	5KG	

\*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

Model		IT8731			
Rated value ( 0 ~ 40 °C )	Input voltage	0~80V			
	Input current	0~40A			
	Input power	200 W			
	Min operation voltage	0.12V at 4A	1.2V at 40A		
CV mode	Range	0~18V	0~80V		
	Resolution	1mV	10mV		
	Accuracy	±(0.05%+0.025%FS)	±(0.05%+0.025%FS)		
CC mode	Range	0~4A	0~40A		
	Resolution	0.1mA	1mA		
	Accuracy	±(0.05%+0.05%FS)	±(0.05%+0.05%FS)		
CR mode *1	Range	0.05Ω~10Ω	10Ω~7.5KΩ		
	Resolution	16bit			
	Accuracy	0.01%+0.08S *2	0.01%+0.0008S		
CP mode *3	Range	200W			
	Resolution	10mW			
	Accuracy	±(0.2%+0.2%FS)			
Dynamic mode					
Dynamic mode	CC mode				
	T1 & T2	20uS~3600S /Res:1u S			
	Accuracy	5uS+100ppm			
	Rising/falling slope *4	0.0001~0.2A/uS	0.001~2A/uS		
	Min Rising time *5	≤15uS	≤15uS		
Measuring range					
Readback voltage	Range	0~18V	0~80V		
	Resolution	0.1 mV	1 mV		
	Accuracy	±(0.025%+0.025%FS)	±(0.025%+0.025%FS)		
Readback current	Range	0~4A	0~40A		
	Resolution	0.1mA	1mA		
	Accuracy	±(0.05%+0.05%FS)			
Readback power	Range	200W			
	Resolution	10mW			
	Accuracy	±(0.2%+0.2%FS)			
Protection range					

OPP	≈ 210W				
OCP	≈ 4.4A		≈ 44A		
OVP	≈ 82V				
OTP	≈ 85°C				
<b>Specification</b>					
Short-circuit	Current ( CC )	≈ 4.4/4A	≈ 44/40A		
	Voltage ( CV )	0V			
	Resistance ( CR )	≈ 30mΩ			
Input impedance	300KΩ				
dimension	82*183*573				
weight	5KG				
safety	CE				

\*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

Model		IT8732			
Rated value ( 0 ~ 40 °C )	Input voltage	0~80V			
	Input current	0~60A			
	Input power	400W			
	Min operation voltage	0.15V at 6A	1.5V at 60A		
CV mode	Range	0~18V	0~80V		
	Resolution	1mV	10mV		
	Accuracy	±(0.05%+0.025%FS)	±(0.05%+0.025%FS)		
CC mode	Range	0~6A	0~60A		
	Resolution	0.1mA	1mA		
	Accuracy	±(0.05%+0.05%FS)	±(0.05%+0.05%FS)		
CR mode *1	Range	0.05Ω~10Ω	10Ω~7.5KΩ		
	Resolution	16bit			
	Accuracy	0.01%+0.08S *2	0.01%+0.0008S		
CP mode *3	Range	400W			
	Resolution	10mW			
	Accuracy	±(0.2%+0.2%FS)			
Dynamic mode					
Dynamic mode	CC mode				
	T1 & T2	20uS~3600S /Res:1u S			
	Accuracy	5uS+100ppm			
	Rising/falling slope *4	0.0001~0.25A/uS	0.001~2.5A/uS		
	Min Rising time *5	≈ 15uS	≈ 15uS		
Measuring range					
Readback voltage	Range	0~18V	0~80V		
	Resolution	0.1 mV	1 mV		
	Accuracy	±(0.025%+0.025%FS)	±(0.025%+0.025%FS)		
Readback current	Range	0~6A	0~60A		
	Resolution	0.1mA	1mA		

	Accuracy	$\pm(0.05\%+0.05\%FS)$			
Readback power	Range	400W			
	Resolution	10mW			
	Accuracy	$\pm(0.2\%+0.2\%FS)$			
<b>Protection range</b>					
OPP	$\approx 400W$				
OCP	$\approx 6.6A$		$\approx 66A$		
OVP	$\approx 82V$				
OTP	$\approx 85^\circ C$				
<b>Specification</b>					
Short-circuit	Current (CC)	$\approx 6.6/6A$	$\approx 66/60A$		
	Voltage (CV)	0V			
	Resistance (CR)	$\approx 25m\Omega$			
Input impedance	300KΩ				
dimension	82*183*573				
weight	5KG				
safety	CE				

\*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

Model		IT8733			
Rated value ( 0 ~ 40 °C )	Input voltage	0~80V			
	Input current	0~120A			
	Input power	600W			
	Min operation voltage	0.24V at 12A	2.4V at 120A		
CV mode	Range	0~18V	0~80V		
	Resolution	1mV	10mV		
	Accuracy	$\pm(0.05\%+0.025\%FS)$	$\pm(0.05\%+0.025\%FS)$		
CC mode	Range	0~12A	0~120A		
	Resolution	1mA	10mA		
	Accuracy	$\pm(0.05\%+0.05\%FS)$	$\pm(0.1\%+0.05\%FS)$		
CR mode *1	Range	$0.2\Omega\sim10\Omega$	$10\Omega\sim7.5K\Omega$		
	Resolution	16bit			
	Accuracy	0.01%+0.08S *2	0.01%+0.0008S		
CP mode *3	Input voltage	600W			
	Input current	10mW			
	Input power	$\pm(0.2\%+0.2\%FS)$			
<b>Dynamic mode</b>					
Dynamic mode	CC mode				
	T1 & T2	20uS~3600S /Res:1u S			
	Accuracy	5uS+100ppm			
	Rising/falling slope *4	0.0001~0.25A/uS	0.001~2.5A/uS		
	Min Rising time *5	$\approx 35uS$	$\approx 35uS$		
<b>Measuring range</b>					

<b>Readback voltage</b>	Range	0~18V	0~80V		
	Resolution	0.1 mV	1 mV		
	Accuracy	$\pm(0.025\%+0.025\%FS)$	$\pm(0.025\%+0.025\%FS)$		
<b>Readback current</b>	Range	0~12A	0~120A		
	Resolution	0.1mA	1mA		
	Accuracy	$\pm(0.05\%+0.05\%FS)$			
<b>Readback power</b>	Range	600W			
	Resolution	10mW			
	Accuracy	$\pm(0.2\%+0.2\%FS)$			
<b>Protection range</b>					
<b>OPP</b>	$\cong 600W$				
<b>OCP</b>	$\cong 13.2A$		$\cong 132A$		
<b>OVP</b>	$\cong 82V$				
<b>OTP</b>	$\cong 85^\circ C$				
<b>Specification</b>					
<b>Short-circuit</b>	Current ( CC )	$\cong 13.2/12A$	$\cong 132/120A$		
	Voltage ( CV )	0V			
	Resistance( CR )	$\cong 15m\Omega$			
<b>Input impedance</b>	$\cong 300K\Omega$				
<b>dimension</b>	82*183*573mm				
<b>weight</b>	5KG				
<b>safety</b>	CE				

\*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

IT8722B is double channels module which dynamically allocates power and the specification of each channel is the same.

<b>Model</b>		<b>IT8722B</b>			
<b>Rated value</b> <i>( 0 ~ 40 °C )</i>	Input voltage	0~500V			
	Input current	0~15A			
	Input power	250W *1			
<b>CV mode</b>	Min operation voltage	0.8V/3A	4.0V/15A		
	Range	0.1~50V	0.1~500V		
	Resolution	1mV	10mV		
<b>CC mode</b>	Accuracy	$\pm(0.05\%+0.05\%FS)$	$\pm(0.05\%+0.05\%FS)$		
	Range	0~3A	0~15A		
	Resolution	0.1mA	1mA		
<b>CR mode</b> <i>*2</i>	Accuracy	$\pm(0.05\%+0.05\%FS)$	$\pm(0.05\%+0.05\%FS)$		
	Range	0.3Ω~10Ω	10Ω~7.5KΩ		
	Resolution	16bit			
<b>CP mode</b> <i>*5</i>	Accuracy	0.01%+0.08S *3	0.01%+0.0008S		
	Range	250W *4			
	Resolution	10mW			
<b>Dynamic mode</b>					
<b>Dynamic mode</b>	CC Mode				
	T1 & T2	20uS~3600S/Res:1uS			
	Accuracy	5uS±100ppm			

	Rising/falling slope *6	0.0001~0.1A/uS	0.001~0.5A/uS		
	Min Rising time *7	≈20uS	≈20uS		
<b>Measuring range</b>					
<b>Readback voltage</b>	Range	0~50V	0~500V		
	Resolution	1 mV	10 mV		
	Accuracy	±(0.025%+0.025%FS)	±(0.025%+0.025%FS)		
<b>Readback current</b>	Range	0~3A	0~15A		
	Resolution	0.01mA	0.1mA		
	Accuracy	±(0.05%+0.05%FS)			
<b>Readback power</b>	Range	250W			
	Resolution	10mW			
	Accuracy	±(0.2%+0.2%FS)			
<b>Protection range</b>					
<b>OPP</b>	≈260W				
<b>OCP</b>	≈3.3A		≈16.5A		
<b>OVP</b>	≈530V				
<b>OTP</b>	≈85°C				
<b>Specification</b>					
<b>Short-circuit</b>	Current ( CC )	≈3.3/3A	≈16.5/15A		
	Voltage ( CV )	0V			
	Resistance ( CR )	≈260mΩ			
<b>Input impedance</b>	≈1MΩ				
<b>dimension W*H*D (mm)</b>	82*183*573				
<b>weight</b>	5KG				

\*1 Dynamically allocate power. The maximum power of single channel is 250W. The total power of both channels is less than or equal to 300W. The average power of each channel is 150W.

\*2 The voltage/current input is no less than 10% FS (FS= Full Scale)

\*3 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) )

\*4 Dynamically allocate power. The maximum power of single channel is 250W. The total power of both channels is less than or equal to 300W.

\*5 The voltage/current input is no less than 10% FS

\*6 Ascending/descending slope: 10%-90% current ascending slope from 0 to maximum current

\*7 Minimum rise time: 10%-90% current rise time

<b>Model</b>		<b>IT8732B</b>	
<b>Rated value ( 0 ~ 40 °C )</b>	Input voltage	0~500V	
	Input current	0~20A	
	Input power	300 W	
	Min operation voltage	0.72V at 3A	4.8V at 20A
<b>CV mode</b>	Range	0~18V	0~500V
	Resolution	1mV	10mV
	Accuracy	±(0.05%+0.02%FS)	±(0.05%+0.025%FS)
<b>CC mode</b>	Range	0~3A	0~20A
	Resolution	0.1mA	1mA
	Accuracy	±(0.05%+0.05%FS)	±(0.05%+0.05%FS)
<b>CR mode *1</b>	Range	0.25Ω~10Ω	10Ω~7.5KΩ
	Resolution	16bit	
	Accuracy	0.01%+0.08S *2	0.01%+0.0008S
<b>CP mode *3</b>	Input voltage	300W	
	Input current	10mW	
	Input power	±(0.2%+0.2%FS)	
<b>Dynamic mode</b>			

		CC mode			
<b>Dynamic mode</b>		T1 & T2 20uS~3600S /Res:1u S			
Accuracy		5uS+100ppm			
Rising/falling slope <small>*4</small>		0.0001~0.1A/uS	0.001~0.8A/uS		
Min Rising time <small>*5</small>		≈20uS	≈20uS		
Measuring range					
<b>Readback voltage</b>	Range	0~18V	0~500V		
	Resolution	1 mV	10 mV		
	Accuracy	±(0.025%+0.025%FS)	±(0.025%+0.025%FS)		
<b>Readback current</b>	Range	0~3A	0~20A		
	Resolution	0.01mA	0.1mA		
	Accuracy	±(0.05%+0.05%FS)			
<b>Readback power</b>	Range	300W			
	Resolution	10mW			
	Accuracy	±(0.2%+0.2%FS)			
Protection range					
<b>OPP</b>	≈310W				
<b>OCP</b>	≈3.3A		≈22A		
<b>OVP</b>	≈530V				
<b>OTP</b>	≈85°C				
Specification					
<b>Short-circuit</b>	Current ( CC )	≈3.3/3A	≈22/20A		
	Voltage ( CV )	0V			
	Resistance ( CR )	≈240mΩ			
<b>Input impedance</b>	≈1MΩ				
<b>dimension</b>	82*183*573mm				
<b>weight</b>	5KG				
<b>safety</b>	CE				

\*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

Model		IT8733B	
<b>Rated value</b> <small>( 0 ~ 40 °C )</small>	Input voltage	0~500V	
	Input current	0~30A	
	Input power	500 W	
	Min operation voltage	0.54V/3A	5.4V/30A
<b>CV mode</b>	Range	0~18V	0~500V
	Resolution	1mV	10mV
	Accuracy	±(0.05%+0.025%FS)	±(0.05%+0.025%FS)
<b>CC mode</b>	Range	0~3A	0~30A
	Resolution	0.1mA	1mA
	Accuracy	±(0.05%+0.05%FS)	±(0.05%+0.05%FS)
<b>CR mode</b> <small>*1</small>	Range	0.2Ω~10Ω	10Ω~7.5KΩ
	Resolution	16bit	
	Accuracy	0.01%+0.08S <small>*2</small>	0.01%+0.0008S
<b>CP mode</b>	Range	500W	

<b>*3</b>	Resolution	10mW			
	Accuracy	$\pm(0.2\%+0.2\%FS)$			
<b>Dynamic mode</b>					
<b>Dynamic mode</b>	CC mode				
	T1 & T2	20uS~3600S/Res:1uS			
	Accuracy	5uS+100ppm			
	Rising/falling slope <b>*4</b>	0.0001~0.08A/uS	0.001~0.8A/uS		
	Min Rising time <b>*5</b>	$\approx 25\mu\text{s}$	$\approx 25\mu\text{s}$		
<b>Measuring range</b>					
<b>Readback voltage</b>	Range	0~18V	0~500V		
	Resolution	1 mV	10mV		
	Accuracy	$\pm(0.025\%+0.025\%FS)$	$\pm(0.025\%+0.025\%FS)$		
<b>Readback current</b>	Range	0~3A	0~30A		
	Resolution	0.01mA	0.1mA		
	Accuracy	$\pm(0.05\%+0.05\%FS)$			
<b>Readback power</b>	Range	500W			
	Resolution	10mW			
	Accuracy	$\pm(0.2\%+0.2\%FS)$			
<b>Protection range</b>					
<b>OPP</b>	$\approx 510\text{W}$				
<b>OCP</b>	$\approx 3.3\text{A}$		$\approx 33\text{A}$		
<b>OVP</b>	$\approx 530\text{V}$				
<b>OTP</b>	$\approx 85^\circ\text{C}$				
<b>Specification</b>					
<b>Short-circuit</b>	Current ( CC )	$\approx 3.3/3\text{A}$	$\approx 33/30\text{A}$		
	Voltage ( CV )	0V			
	Resistance ( CR )	180m $\Omega$			
<b>Input impedance</b>	1M $\Omega$				
<b>dimension</b>	82*183*573mm				
<b>weight</b>	5KG				
<b>safety</b>	CE				

\*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

<b>Model</b>		<b>IT8722P</b>	
<b>Rated value ( 0 ~ 40 °C )</b>	Input voltage	0~80V	
	Input current	0~20A	
	Input power	250W <b>*1</b>	
	Min operation voltage	0.15V/3A	1.0V/20A
<b>CV mode</b>	Range	0~18V	0~80V
	Resolution	1Mv	10mV
	Accuracy	$\pm(0.05\%+0.025\%FS)$	$\pm(0.05\%+0.025\%FS)$
<b>CC mode</b>	Range	0~3A	0~20A
	Resolution	0.1mA	1mA
	Accuracy	$\pm(0.05\%+0.05\%FS)$	$\pm(0.05\%+0.05\%FS)$
<b>CR mode</b>	Range	0.05Ω~10Ω	10Ω~7.5KΩ

<b>*2</b>	Resolution	16bit			
	Accuracy	0.01%+0.08S <b>*3</b>	0.01%+0.0008S		
<b>CP mode *5</b>	Range	250W <b>*4</b>			
	Resolution	10mW			
	Accuracy	±(0.2%+0.2%FS)			
<b>Dynamic mode</b>					
<b>Dynamic mode</b>	CC mode				
	T1 & T2	20uS~3600S/Res:1uS			
	Accuracy	5uS±100ppm			
	Rising/falling slope <b>*6</b>	0.0001~0.2A/uS	0.001~1.6A/uS		
	Min Rising time <b>*7</b>	≈10uS	≈10uS		
<b>Measuring range</b>					
<b>Readback voltage</b>	Range	0~18V	0~80V		
	Resolution	0.1 mV	1 mV		
	Accuracy	±(0.025%+0.025%FS)	±(0.025%+0.025%FS)		
<b>Readback current</b>	Range	0~3A	0~20A		
	Resolution	0.01mA	0.1mA		
	Accuracy	±(0.05%+0.05%FS)			
<b>Readback power</b>	Range	250W			
	Resolution	10mW			
	Accuracy	±(0.2%+0.2%FS)			
<b>Protection range</b>					
<b>OPP</b>	≈250W				
<b>OCP</b>	≈3.3A		≈22A		
<b>OVP</b>	≈82V				
<b>OTP</b>	≈85°C				
<b>Specification</b>					
<b>Short-circuit</b>	Current ( CC )	≈3.3/3A	≈22/20A		
	Voltage ( CV )	0V			
	Resistance ( CR )	≈50mΩ			
<b>Input impedance</b>	300KΩ				
<b>dimension</b>	82*183*573				
<b>weight</b>	5KG				

**\*1** Dynamically allocate power. The maximum power of single channel is 250W. The total power of both channels is less than or equal to 300W. The average power of each channel is 150W.

**\*2** The voltage/current input is no less than 10% FS (FS= Full Scale)

**\*3** 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) )

**\*4** Dynamically allocate power. The maximum power of single channel is 250W. The total power of both channels is less than or equal to 300W.

**\*5** The voltage/current input is no less than 10% FS

**\*6** Ascending/descending slope: 10%-90% current ascending slope from 0 to maximum current

**\*7** Minimum rise time: 10%-90% current rise time

<b>Model</b>		<b>IT8723P</b>	
<b>Rated value ( 0 ~ 40 °C )</b>	Input voltage	0~80V	
	Input current	0~45A	
	Input power	300W	
	Min operation voltage	0.14V/4.5A	1.4V/45A
<b>CV mode</b>	Range	0~18V	0~80V

	Resolution	1mV	10mV		
	Accuracy	$\pm(0.05\%+0.025\%FS)$	$\pm(0.05\%+0.025\%FS)$		
<b>CC mode</b>	Range	0~4.5A	0~45A		
	Resolution	0.1mA	1mA		
<b>CR mode</b> <sup>*1</sup>	Accuracy	$\pm(0.05\%+0.05\%FS)$	$\pm(0.05\%+0.05\%FS)$		
	Range	0.05Ω~10Ω	10Ω~7.5KΩ		
<b>CP mode</b> <sup>*3</sup>	Resolution	16bit			
	Accuracy	0.01%+0.08S <sup>*2</sup>	0.01%+0.0008S		
	Range	300W			
	Resolution	10mW			
	Accuracy	$\pm(0.2\%+0.2\%FS)$			
<b>Dynamic mode</b>					
<b>Dynamic mode</b>	<b>CC mode</b>				
	T1 & T2	20μS~3600S/Res:1μS			
	Accuracy	5μS±100ppm			
	Rising/falling slope <sup>*4</sup>	0.0001~0.25A/μS	0.001~2.5A/μS		
	Min Rising time <sup>*5</sup>	$\approx 12\mu S$	$\approx 12\mu S$		
<b>Measuring range</b>					
<b>Readback voltage</b>	Range	0~18V	0~80V		
	Resolution	0.1 mV	1 mV		
	Accuracy	$\pm(0.025\%+0.025\%FS)$	$\pm(0.025\%+0.025\%FS)$		
<b>Readback current</b>	Range	0~4.5A	0~45A		
	Resolution	0.1mA	1mA		
	Accuracy	$\pm(0.05\%+0.05\%FS)$			
<b>Readback power</b>	Range	300W			
	Resolution	10mW			
	Accuracy	$\pm(0.2\%+0.2\%FS)$			
<b>Protection range</b>					
<b>OPP</b>	$\approx 310W$				
<b>OCP</b>	$\approx 5A$		$\approx 50A$		
<b>OVP</b>	$\approx 82V$				
<b>OTP</b>	$\approx 85^{\circ}C$				
<b>Specification</b>					
<b>Short-circuit</b>	Current ( CC )	$\approx 5/4.5A$	$\approx 50/45A$		
	Voltage ( CV )	0V			
	Resistance ( CR )	$\approx 30m\Omega$			
<b>Input impedance</b>	300KΩ				
<b>dimension</b>	82*183*573				
<b>weight</b>	5KG				

\*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

<b>Model</b>		<b>IT8731P</b>
<b>Rated value</b> <b>( 0 ~ 40 °C )</b>	Input voltage	0~80V
	Input current	0~40A
	Input power	200W

	Min operation voltage	0.12V/4A	1.2V/40A		
CV mode	Range	0~18V	0~80V		
	Resolution	1mV	10mV		
	Accuracy	$\pm(0.05\%+0.025\%FS)$	$\pm(0.05\%+0.025\%FS)$		
CC mode	Range	0~4A	0~40A		
	Resolution	0.1mA	1mA		
	Accuracy	$\pm(0.05\%+0.05\%FS)$	$\pm(0.05\%+0.05\%FS)$		
CR mode *1	Range	0.05Ω~10Ω	10Ω~7.5KΩ		
	Resolution	16bit			
	Accuracy	0.01%+0.08S *2	0.01%+0.0008S		
CP mode *3	Range	200W			
	Resolution	10mW			
	Accuracy	$\pm(0.2\%+0.2\%FS)$			
<b>Dynamic mode</b>					
Dynamic mode	CC mode				
	T1 & T2	20μS~3600S/Res:1μS			
	Accuracy	5μS±100ppm			
	Rising/falling slope *4	0.0001~0.2A/μS	0.001~2A/μS		
	Min Rising time *5	≈ 15μS	≈ 15μS		
<b>Measuring range</b>					
Readback voltage	Range	0~18V	0~80V		
	Resolution	0.1 mV	1 mV		
	Accuracy	$\pm(0.025\%+0.025\%FS)$	$\pm(0.025\%+0.025\%FS)$		
Readback current	Range	0~4A	0~40A		
	Resolution	0.1mA	1mA		
	Accuracy	$\pm(0.05\%+0.05\%FS)$			
Readback power	Range	200W			
	Resolution	10mW			
	Accuracy	$\pm(0.2\%+0.2\%FS)$			
<b>Protection range</b>					
OPP	≈ 210W				
OCP	≈ 4.4A		≈ 44A		
OVP	≈ 82V				
OTP	≈ 85°C				
<b>Specification</b>					
Short-circuit	Current ( CC )	≈ 4.4/4A	≈ 44/40A		
	Voltage ( CV )	0V			
	Resistance ( CR )	≈ 30mΩ			
Input impedance	300KΩ				
dimension	82*183*573				
weight	5KG				
safety	CE				

\*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

Model		IT8732P			
Rated value ( 0 ~ 40 °C )	Input voltage	0~80V			
	Input current	0~60A			
	Input power	400W			
	Min operation voltage	0.15V/6A	1.5V/60A		
CV mode	Range	0~18V	0~80V		
	Resolution	1mV	10mV		
	Accuracy	±(0.05%+0.025%FS)	±(0.05%+0.025%FS)		
CC mode	Range	0~6A	0~60A		
	Resolution	0.1mA	1mA		
	Accuracy	±(0.05%+0.05%FS)	±(0.05%+0.05%FS)		
CR mode *1	Range	0.05Ω~10Ω	10Ω~7.5KΩ		
	Resolution	16bit			
	Accuracy	0.01%+0.08S *2	0.01%+0.0008S		
CP mode *3	Range	400W			
	Resolution	10mW			
	Accuracy	±(0.2%+0.2%FS)			
Dynamic mode					
Dynamic mode	CC mode				
	T1 & T2	20uS~3600S/Res:1uS			
	Accuracy	5uS±100ppm			
	Rising/falling slope *4	0.0001~0.25A/uS	0.001~2.5A/uS		
	Min Rising time *5	≈ 15uS	≈ 15uS		
Measuring range					
Readback voltage	Range	0~18V	0~80V		
	Resolution	0.1 mV	1 mV		
	Accuracy	±(0.025%+0.025%FS)	±(0.025%+0.025%FS)		
Readback current	Range	0~6A	0~60A		
	Resolution	0. 1mA	1mA		
	Accuracy	±(0.05%+0.05%FS)			
Readback power	Range	400W			
	Resolution	10mW			
	Accuracy	±(0.2%+0.2%FS)			
Protection range					
OPP	≈ 410W				
OCP	≈ 6.6A		≈ 66A		
OVP	≈ 82V				
OTP	≈ 85 °C				
Specification					
Short-circuit	Current ( CC )	≈ 6.6/6A	≈ 66/60A		
	Voltage ( CV )	0V			
	Resistance ( CR )	≈ 25mΩ			
Input impedance	300KΩ				
dimension	82*183*573				
weight	5KG				
safety	CE				

\*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

<b>Model</b>		<b>IT8733P</b>			
<b>Rated value ( 0 ~ 40 °C )</b>	Input voltage	0~80V			
	Input current	0~120A			
	Input power	600W			
	Min operation voltage	0.24V/12A	2.4V/120A		
<b>CV mode</b>	Range	0~18V	0~80V		
	Resolution	1mV	10mV		
	Accuracy	±(0.05%+0.025%FS)	±(0.05%+0.025%FS)		
<b>CC mode</b>	Range	0~12A	0~120A		
	Resolution	1mA	10mA		
	Accuracy	±(0.05%+0.05%FS)	±(0.1%+0.05%FS)		
<b>CR mode *1</b>	Range	0.05Ω~10Ω	10Ω~7.5KΩ		
	Resolution	16bit			
	Accuracy	0.01%+0.08S *2	0.01%+0.0008S		
<b>CP mode *3</b>	Range	600W			
	Resolution	10mW			
	Accuracy	±(0.2%+0.2%FS)			
<b>Dynamic mode</b>					
<b>Dynamic mode</b>	CC mode				
	T1 & T2	20uS~3600S/Res:1uS			
	Accuracy	5uS±100ppm			
	Rising/falling slope *4	0.001~0.25A/uS	0.01~2.5A/uS		
	Min Rising time *5	≈35uS	≈35uS		
<b>Measuring range</b>					
<b>Readback voltage</b>	Range	0~18V	0~80V		
	Resolution	0.1 mV	1 mV		
	Accuracy	±(0.025%+0.025%FS)	±(0.025%+0.025%FS)		
<b>Readback current</b>	Range	0~12A	0~120A		
	Resolution	0.1mA	1mA		
	Accuracy	±(0.05%+0.05%FS)			
<b>Readback power</b>	Range	600W			
	Resolution	10mW			
	Accuracy	±(0.2%+0.2%FS)			
<b>Protection range</b>					
<b>OPP</b>	≈610W				
<b>OCP</b>	≈13.2A		≈132A		
<b>OVP</b>	≈82V				
<b>OTP</b>	≈85°C				
<b>Specification</b>					
<b>Short-circuit</b>	Current ( CC )	≈13.2/12A	≈132/120A		
	Voltage ( CV )	0V			
	Resistance ( CR )	≈20mΩ			
<b>Input impedance</b>	300KΩ				
<b>dimension</b>	82*183*573				
<b>weight</b>	5KG				
<b>safety</b>	CE				

- \*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

<b>Model</b>		<b>IT8722BP</b>			
<b>Rated value ( 0 ~ 40 °C )</b>	Input voltage	0~500V			
	Input current	0~15A			
	Input power	250W *1			
	Min operation voltage	0.8V/3A	4.0V/15A		
<b>CV mode</b>	Range	0.1~50V	0.1~500V		
	Resolution	1mV	10mV		
	Accuracy	±(0.05%+0.05%FS)	±(0.05%+0.05%FS)		
<b>CC mode</b>	Range	0~3A	0~15A		
	Resolution	0.1mA	1mA		
	Accuracy	±(0.05%+0.05%FS)	±(0.05%+0.05%FS)		
<b>CR mode *2</b>	Range	0.3Ω~10Ω	10Ω~7.5KΩ		
	Resolution	16bit			
	Accuracy	0.01%+0.08S *3	0.01%+0.0008S		
<b>CP mode *5</b>	Range	250W *4			
	Resolution	10mW			
	Accuracy	±(0.2%+0.2%FS)			
<b>Dynamic mode</b>					
<b>Dynamic mode</b>	<b>CC mode</b>				
	T1 & T2	20uS~3600S/Res:1uS			
	Accuracy	5uS±100ppm			
	Rising/falling slope *6	0.0001~0.1A/uS	0.001~0.5A/uS		
	Min Rising time *7	≈20uS	≈20uS		
<b>Measuring range</b>					
<b>Readback voltage</b>	Range	0~50V	0~500V		
	Resolution	1 mV	10 mV		
	Accuracy	±(0.025%+0.025%FS)	±(0.025%+0.025%FS)		
<b>Readback current</b>	Range	0~3A	0~15A		
	Resolution	0.01mA	0.1mA		
	Accuracy	±(0.05%+0.05%FS)			
<b>Readback power</b>	Range	250W			
	Resolution	10mW			
	Accuracy	±(0.2%+0.2%FS)			
<b>Protection range</b>					
<b>OPP</b>	≈ 260W				
<b>OCP</b>	≈ 3.3A		≈ 16.5A		
<b>OVP</b>	≈ 530V				
<b>OTP</b>	≈ 85°C				
<b>Specification</b>					
<b>Short-circuit</b>	Current ( CC )	≈ 3.3/3A	≈ 16.5/15A		
	Voltage ( CV )	0V			
	Resistance ( CR )	≈ 260mΩ			

<b>Input impedance</b>	$\approx 1M\Omega$	
<b>dimension</b>	82*183*573	
<b>weight</b>	5KG	

\*1 Dynamically allocate power. The maximum power of single channel is 250W. The total power of both channels is less than or equal to 300W. The average power of each channel is 150W.

\*2 The voltage/current input is no less than 10% FS (FS= Full Scale)

\*3 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) )

\*4 Dynamically allocate power. The maximum power of single channel is 250W. The total power of both channels is less than or equal to 300W.

\*5 The voltage/current input is no less than 10% FS

\*6 Ascending/descending slope: 10%-90% current ascending slope from 0 to maximum current

\*7 Minimum rise time: 10%-90% current rise time

<b>Model</b>			<b>IT8732BP</b>				
<b>Rated value</b> ( 0 ~ 40 °C )	Input voltage	0~500V					
	Input current	0~20A					
	Input power	300W					
	Min operation voltage	0.72V/3A	4.8V/20A				
<b>CV mode</b>	Range	0~18V	0~500V				
	Resolution	1mV	10mV				
	Accuracy	$\pm(0.05\%+0.025\%FS)$	$\pm(0.05\%+0.025\%FS)$				
<b>CC mode</b>	Range	0~3A	0~20A				
	Resolution	0.1mA	1mA				
	Accuracy	$\pm(0.05\%+0.05\%FS)$	$\pm(0.05\%+0.05\%FS)$				
<b>CR mode</b> *1	Range	0.25Ω~10Ω	10Ω~7.5KΩ				
	Resolution	16bit					
	Accuracy	0.01%+0.08S *2	0.01%+0.0008S				
<b>CP mode</b> *3	Range	300W					
	Resolution	10mW					
	Accuracy	$\pm(0.2\%+0.2\%FS)$					
<b>Dynamic mode</b>							
<b>Dynamic mode</b>	<b>CC mode</b>						
	T1 & T2	20uS~3600S/Res:1uS					
	Accuracy	5uS±100ppm					
	Rising/falling slope *4	0.0001~0.1A/uS	0.001~0.8A/uS				
	Min Rising time *5	$\approx 20\mu S$	$\approx 20\mu S$				
<b>Measuring range</b>							
<b>Readback voltage</b>	Range	0~18V	0~500V				
	Resolution	1 mV	10 mV				
	Accuracy	$\pm(0.025\%+0.025\%FS)$	$\pm(0.025\%+0.025\%FS)$				
<b>Readback current</b>	Range	0~3A	0~20A				
	Resolution	0.01mA	0.1mA				
	Accuracy	$\pm(0.05\%+0.05\%FS)$					
<b>Readback power</b>	Range	300W					
	Resolution	10mW					
	Accuracy	$\pm(0.2\%+0.2\%FS)$					
<b>Protection range</b>							
<b>OPP</b>	$\approx 310W$						
<b>OCP</b>	$\approx 3.3A$		$\approx 22A$				
<b>OVP</b>	$\approx 530V$						

<b>OTP</b>	$\approx 85^\circ\text{C}$				
<b>Specification</b>					
<b>Short-circuit</b>	Current ( CC )	$\approx 3.3/3\text{A}$	$\approx 22/20\text{A}$		
	Voltage ( CV )	0V			
	Resistance ( CR )	$\approx 240\text{m}\Omega$			
<b>Input impedance</b>	$1\text{M}\Omega$				
<b>dimension</b>	82*183*573				
<b>weight</b>	5KG				
<b>safety</b>	CE				

\*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

<b>Model</b>		<b>IT8733BP</b>			
<b>Rated value</b> <b>( 0 ~ 40 °C )</b>	Input voltage	0~500V			
	Input current	0~30A			
	Input power	500W			
	Min operation voltage	0.54V/3A	5.4V/30A		
<b>CV mode</b>	Range	0~18V	0~500V		
	Resolution	1mV	10mV		
	Accuracy	$\pm(0.05\%+0.025\%\text{FS})$	$\pm(0.05\%+0.025\%\text{FS})$		
<b>CC mode</b>	Range	0~3A	0~30A		
	Resolution	0.1mA	1mA		
	Accuracy	$\pm(0.05\%+0.05\%\text{FS})$	$\pm(0.05\%+0.05\%\text{FS})$		
<b>CR mode</b> <b>*1</b>	Range	0.2Ω~10Ω	10Ω~7.5KΩ		
	Resolution	16bit			
	Accuracy	0.01%+0.08S <b>*2</b>	0.01%+0.0008S		
<b>CP mode</b> <b>*3</b>	Range	500W			
	Resolution	10mW			
	Accuracy	$\pm(0.2\%+0.2\%\text{FS})$			
<b>Dynamic mode</b>					
<b>Dynamic mode</b>	<b>CC mode</b>				
	T1 & T2	20uS~3600S/Res:1uS			
	Accuracy	5uS±100ppm			
	Rising/falling slope <b>*4</b>	0.0001~0.08A/uS	0.001~0.8A/uS		
	Min Rising time <b>*5</b>	$\approx 25\mu\text{S}$	$\approx 25\mu\text{S}$		
<b>Measuring range</b>					
<b>Readback voltage</b>	Range	0~18V	0~500V		
	Resolution	1 mV	10 mV		
	Accuracy	$\pm(0.025\%+0.025\%\text{FS})$	$\pm(0.025\%+0.025\%\text{FS})$		
<b>Readback current</b>	Range	0~3A	0~30A		
	Resolution	0. 01mA	0.1mA		
	Accuracy	$\pm(0.05\%+0.05\%\text{FS})$			
<b>Readback power</b>	Range	500W			
	Resolution	10mW			
	Accuracy	$\pm(0.2\%+0.2\%\text{FS})$			
<b>Protection range</b>					

<b>OPP</b>	$\leq 510W$				
<b>OCP</b>	$\leq 3.3A$		$\leq 33A$		
<b>OVP</b>	$\leq 530V$				
<b>OTP</b>	$\leq 85^{\circ}C$				
<b>Specification</b>					
<b>Short-circuit</b>	Current ( CC )	$\leq 3.3/3A$	$\leq 33/30A$		
	Voltage ( CV )	$0V$			
	Resistance ( CR )	$\leq 180m\Omega$			
<b>Input impedance</b>	$1M\Omega$				
<b>dimension</b>	$82*183*573$				
<b>weight</b>	$5KG$				
<b>safety</b>	$CE$				

\*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

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

## 5.2 Supplementary characteristics

Storage capacity: 101 sets

Suggested calibration frequency: one time each year.

Cooling style: fan.

Fans control temperature:

Temperature	$35^{\circ}C$	$50^{\circ}C$	$70^{\circ}C$	$85^{\circ}C$
Fans status	The first grade	The second grade	The third grade	OTP