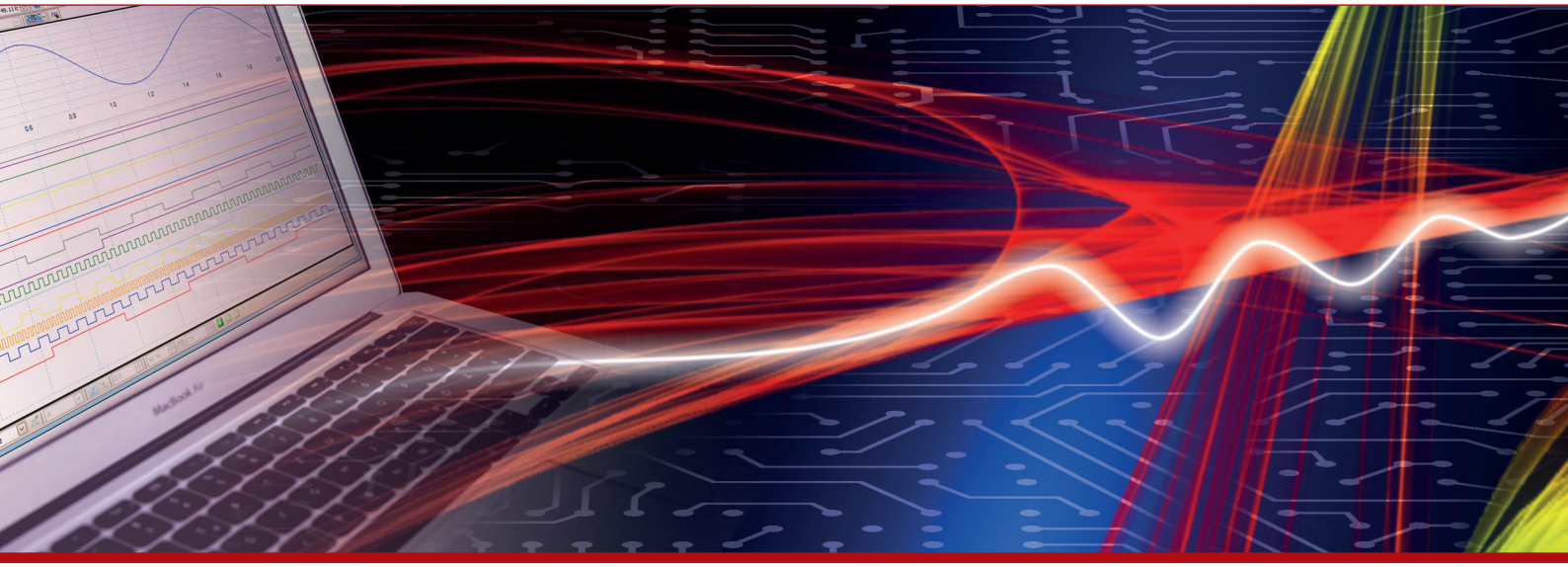
Product Datasheet - Technical Specifications



More information in our Web-Shop at ▸ **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**

Downloads:
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**

www.meilhaus.de

10 Technical Specification

This chapter will introduce the main technical parameters of this instrument, such as rated voltage/current/power and so on. Besides, we will introduce the working environment and storage temperature.

- IT-M3612
- IT-M3622
- IT-M3632
- IT-M3613
- IT-M3623
- IT-M3633
- IT-M3614
- IT-M3624
- IT-M3634
- IT-M3615
- IT-M3625
- IT-M3635

10.1 IT-M3612

Source Mode

Source Parameter		
Rated value(0 ℃-40 ℃)	Output Voltage	0-60V
	Output Current	-30A~30A
	Output Power	-200W~200W
	Min. operating voltage	3.6V at -30A
CC	Range	-30A~30A
	Setup Resolution	10mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-60V
	Setup Resolution	1mV
	Accuracy	<0.1% Umax
Output Resistance (positive current mode)	Range	0-1000mΩ
	Setup Resolution	0.1mΩ
	Accuracy	2%*Rmax

CP	Range	-200W~200W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Output Read-back		
Read-back current	Range	-30A~30A
	Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-60V
	Resolution	1mV
	Accuracy	<0.1% Umax
Read-back Power	Range	-200W~200W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Battery Test		
AH Measurement	AH Range	0AH-300AH
	Accuracy	0.20%
	Resolution	0.001AH
Regulation		
Load Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Line Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Ripple		
Ripple	Voltage	≤100mVp-p
	Current	≤30mArms
value voltage rise/fall time		
Rise time	Voltage(No load)	5ms
Rise time	Voltage(Full load)	10ms
Fall time	Voltage(No load)	5ms

Fall time	Voltage(Full load)	5ms
Output Protection range		
OCP		-31A or 31A
OVP		61V
OPP		-210W or 210W
External analog (optional)		
Voltage programming		External 0V~10V is 0~60V
Voltage monitoring		External 0V~10V is 0~60V
Current programming		External -10V~10V is -30A~30A
Current monitoring		External -10V~10V is -30A~30A
AC parameters		
Voltage range		100VAC -240VAC
OVP		264VAC
UVP		90VAC
Frequency		47Hz~63Hz
Max. current (rms)		1Aac (AC220V)
DC Offset		-0.1A~+0.1A
Environment		
Working temperature		0- 40 °C
Storage temperature		-20- 70℃
Noise		60dB
External temperature measurement		
Measurement range		-20℃——120℃
Measurement accuracy		±1℃
Measurement resolution		0.1℃
Efficiency		
Max. efficiency (Full-load)		86%
Communication (Optional)		
Communication interfaces		RS232/USB/RS485/CAN/LAN/GPIB/Analog
Mechanical parameters		
Size and weight		450mm*214mm*43.5mm
Net weight		5kg

Load Mode

Parameter		IT-M3612 V1.2
Load Parameter		
Rated value(0 ℃-40 ℃)	Input Voltage	0-60V
	Input Current	0-30A
	Input Power	0-200W
	Min. operating voltage	1V at 30A
CC	Range	0-30A
	Setup Resolution	10mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-60V
	Setup Resolution	1mV
	Accuracy	<0.1% Umax
CR	Range	0.04-600Ω
	Resolution	Min.0.001Ω
	Accuracy	(1/Rmin)*2%: (0.04~60Ω), (1/Rmin)*5%: (60~600Ω)
CP	Range	0-200W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Dynamic mode	Rising slope	30A/ms
	Falling slope	30A/ms
	Min. rise time	1ms
Input Read-back		
Read-back current	Range	0-30A
	Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-60V
	Resolution	1mV
	Accuracy	<0.1% Umax
Read-back Resistance	Range	0.04-600Ω
	Resolution	Min.0.001Ω

	Accuracy	(1/Rmin)*2%: (0.04~60Ω), (1/Rmin)*5%: (60~600Ω)
Read-back Power	Range	0-200W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Battery Test		
AH Measurement	AH Range	0AH-300AH
	Accuracy	0.20%
	Resolution	0.001AH
Protection range		
OCP		31A
OVP		61V
OPP		210W
Short circuit test		
Current		33A
External analog (optional)		
Current programming		External 0V~10V is 0~30A
Current monitoring		External 0V~10V is 0~30A
Voltage programming		External 0V~10V is 0~60V
Voltage monitoring		External 0V~10V is 0~60V

Calculation method of resistance precision range in load mode: lower limit: 1/(1/R+(1/R)*0.05+0.004) ; Upper limit: 1/(1/R-(1/R)*0.05-0.004)

10.2 IT-M3622

Source Mode

Source Parameter		
Rated value (0-40 °C)	Output Voltage	0-60V

	Output Current	-30A~30A
	Output Power	-400W~400W
	Min. operating voltage	3.6V at -30A
CC	Range	-30A~30A
	Setup Resolution	10mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-60V
	Setup Resolution	1mV
	Accuracy	<0.1% Umax
Output Resistance (positive current mode)	Range	0-1000mΩ
	Setup Resolution	0.1mΩ
	Accuracy	2%*Rmax
CP	Range	-400W~400W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Output Read-back		
Read-back current	Range	-30A~30A
	Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-60V
	Resolution	1mV
	Accuracy	<0.1% Umax
Read-back Power	Range	-400W~400W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Battery Test		
AH Measurement	AH Range	0AH-300AH
	Accuracy	0.20%

	Resolution	0.001AH
Regulation		
Load Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Line Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Ripple		
Ripple	Voltage	≤100mVp-p
	Current	≤30mArms
value voltage rise/fall time		
Rise time	Voltage(No load)	5ms
Rise time	Voltage(Full load)	10ms
Fall time	Voltage(No load)	5ms
Fall time	Voltage(Full load)	5ms
Output Protection range		
OCP		-31A or 31A
OVP		61V
OPP		-410W or 410W
External analog (optional)		
Voltage programming		External 0V~10V is 0~60V
Voltage monitoring		External 0V~10V is 0~60V
Current programming		External -10V~10V is -30A~30A
Current monitoring		External -10V~10V is -30A~30A
AC parameters		
Voltage range		100VAC -240VAC
OVP		264VAC
UVP		90VAC
Frequency		47Hz~63Hz
Max. current (rms)		2Aac (AC220V)
DC Offset		-0.1A~+0.1A
Environment		
Working temperature		0- 40 °C
Storage temperature		-20- 70℃

Noise	60dB
External temperature measurement	
Measurement range	-20℃——120℃
Measurement accuracy	±1℃
Measurement resolution	0.1℃
Efficiency	
Max. efficiency (Full-load)	86%
Communication (Optional)	
Communication interfaces	RS232/USB/RS485/CAN/LAN/GPIB/Analog
Mechanical parameters	
Size and weight	450mm*214mm*43.5mm
Net weight	5kg

Load Mode:

Parameter		IT-M3622 V1.2
Load Parameter		
Rated value(0 ℃-40 ℃)	Input Voltage	0-60V
	Input Current	0-30A
	Input Power	0-400W
	Min. operating voltage	1V at 30A
CC	Range	0-30A
	Setup Resolution	10mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-60V
	Setup Resolution	1mV
	Accuracy	<0.1% Umax
CR	Range	0.04-600Ω
	Resolution	Min.0.001Ω
	Accuracy	(1/Rmin)*2%: (0.04~60Ω), (1/Rmin)*5%: (60~600Ω)
CP	Range	0-400W

	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Dynamic mode	Rising slope	30A/ms
	Falling slope	30A/ms
	Min. rise time	1ms
Input Read-back		
Read-back current	Range	0-30A
	Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-60V
	Resolution	1mV
	Accuracy	<0.1% Umax
Read-back Resistance	Range	0.04-600Ω
	Resolution	Min.0.001Ω
	Accuracy	(1/Rmin)*2%: (0.04~60Ω), (1/Rmin)*5%: (60~600Ω)
Read-back Power	Range	0-400W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Battery Test		
AH Measurement	AH Range	0AH-300AH
	Accuracy	0.20%
	Resolution	0.001AH
Protection range		
OCP		31A
OVP		61V
OPP		410W
Short circuit test		
Current		33A
External analog (optional)		

Current programming	External 0V~10V is 0~30A
Current monitoring	External 0V~10V is 0~30A
Voltage programming	External 0V~10V is 0~60V
Voltage monitoring	External 0V~10V is 0~60V

Calculation method of resistance precision range in load mode: lower limit: 1/(1/R+(1/R)*0.05+0.004) ; Upper limit: 1/(1/R-(1/R)*0.05-0.004)

10.3 IT-M3632

Source Mode

Source Parameter		
Rated value (0-40 °C)	Output Voltage	0-60V
	Output Current	-30A~30A
	Output Power	-800W~800W
	Min. operating voltage	3.6V at -30A
CC	Range	-30A~30A
	Setup Resolution	10mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-60V
	Setup Resolution	1mV
	Accuracy	<0.1% Umax
Output Resistance (positive current mode)	Range	0-1000mΩ
	Setup Resolution	0.1mΩ
	Accuracy	2%*Rmax
CP	Range	-800W~800W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Output Read-back		
Read-back current	Range	-30A~30A
	Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-60V

	Resolution	1mV
	Accuracy	<0.1% Umax
Read-back Power	Range	-800W~800W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Battery Test		
AH Measurement	AH Range	0AH-300AH
	Accuracy	0.20%
	Resolution	0.001AH
Regulation		
Load Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Line Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Ripple		
Ripple	Voltage	≤100mVp-p
	Current	≤30mArms
value voltage rise/fall time		
Rise time	Voltage(No load)	5ms
Rise time	Voltage(Full load)	10ms
Fall time	Voltage(No load)	5ms
Fall time	Voltage(Full load)	5ms
Output Protection range		
OCP		-31A or 31A
OVP		61V
OPP		-810W or 810W
External analog (optional)		
Voltage programming		External 0V~10V is 0~60V
Voltage monitoring		External 0V~10V is 0~60V
Current programming		External -10V~10V is -30A~30A

Current monitoring	External -10V~10V is -30A~30A
AC parameters	
Voltage range	100VAC -240VAC
OVP	264VAC
UVP	90VAC
Frequency	47Hz~63Hz
Max. current (rms)	4Aac (AC220V)
Power factor PF	>0.98 (Lead or Lag)
DC Offset	-0.1A~+0.1A
Harmonic THDI	<5%
Environment	
Working temperature	0-40 ° C
Storage temperature	-20-70℃
Noise	60dB
External temperature measurement	
Measurement range	-20℃——120℃
Measurement accuracy	±1℃
Measurement resolution	0.1℃
Efficiency	
Max. efficiency (Full-load)	86%
Communication (Optional)	
Communication interfaces	RS232/USB/RS485/CAN/LAN/GPIB/Analog
Mechanical parameters	
Size and weight	450mm*214mm*43.5mm
Net weight	5kg

Load Mode

Load Parameter		
Rated value (0-40 °C)	Input Voltage	0-60V
	Input Current	0-30A
	Input Power	0-800W
	Min. operating voltage	1V at 30A
CC	Range	0-30A

	Setup Resolution	10mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-60V
	Setup Resolution	1mV
	Accuracy	<0.1% Umax
CR	Range	0.04-600Ω
	Resolution	Min.0.001Ω
	Accuracy	(1/Rmin)*2%: (0.04~60Ω), (1/Rmin)*5%: (60~600Ω)
CP	Range	0-800W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Dynamic mode	Rising slope	30A/ms
	Falling slope	30A/ms
	Min. rise time	1ms
Input Read-back		
Read-back current	Range	0-30A
	Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-60V
	Resolution	1mV
	Accuracy	<0.1% Umax
Read-back Resistance	Range	0.04-600Ω
	Resolution	Min.0.001Ω
	Accuracy	(1/Rmin)*2%: (0.04~60Ω), (1/Rmin)*5%: (60~600Ω)
Read-back Power	Range	0-800W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Battery Test		

AH Measurement	AH Range	0AH-300AH
	Accuracy	0.20%
	Resolution	0.001AH
Protection range		
OCP		31A
OVP		61V
OPP		810W
Short circuit test		
Current		33A
External analog (optional)		
Current programming		External 0V~10V is 0~30A
Current monitoring		External 0V~10V is 0~30A
Voltage programming		External 0V~10V is 0~60V
Voltage monitoring		External 0V~10V is 0~60V

Calculation method of resistance precision range in load mode: lower limit: 1/(1/R+(1/R)*0.05+0.004) ; Upper limit: 1/(1/R-(1/R)*0.05-0.004)

10.4 IT-M3613

Source Mode

Source Parameter		
Rated value (0-40 °C)	Output Voltage	0-150V
	Output Current	-12A~12A
	Output Power	-200W~200W
	Min. operating voltage	9V at -12A
CC	Range	-12A~12A
	Setup Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-150V
	Setup Resolution	10mV
	Accuracy	<0.1% Umax

Output Resistance (positive current mode)	Range	0-1000mΩ
	Setup Resolution	0.1mΩ
	Accuracy	2%*Rmax
CP	Range	-200W~200W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Output Read-back		
Read-back current	Range	-12A~12A
	Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-150V
	Resolution	10mV
	Accuracy	<0.1% Umax
Read-back Power	Range	-200W~200W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Regulation		
Load Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Line Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Ripple		
Ripple	Voltage	≤300mVp-p
	Current	≤30mArms
value voltage rise/fall time		
Rise time	Voltage(No load)	20ms
Rise time	Voltage(Full load)	50ms
Fall time	Voltage(No load)	20ms
Fall time	Voltage(Full load)	20ms

Output Protection range	
OCP	-12.5A or 12.5A
OVP	155V
OPP	-210W or 210W
External analog (optional)	
Voltage programming	External 0V~10V is 0~150V
Voltage monitoring	External 0V~10V is 0~150V
Current programming	External -10V~10V is -12A~12A
Current monitoring	External -10V~10V is -12A~12A
AC parameters	
Voltage range	100VAC -240VAC
OVP	264VAC
UVP	90VAC
Frequency	47Hz~63Hz
Max. current (rms)	1Aac (AC220)
DC Offset	-0.1A~+0.1A
Environment	
Working temperature	0- 40 °C
Storage temperature	-20- 70℃
Noise	60dB
External temperature measurement	
Measurement range	-20℃——120℃
Measurement accuracy	±1℃
Measurement resolution	0.1℃
Efficiency	
Max. efficiency (Full-load)	88%
Communication (Optional)	
Communication interfaces	RS232/USB/RS485/CAN/LAN/GPIB/Analog
Mechanical parameters	
Size and weight	450mm*214mm*43.5mm
Net weight	5kg

Load Mode:

Parameter		IT-M3613 V1.2
Load Parameter		
Rated value(0 ℃-40 ℃)	Input Voltage	0-150V
	Input Current	0-12A
	Input Power	0-200W
	Min. operating voltage	2V at 12A
CC	Range	0-12A
	Setup Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-150V
	Setup Resolution	10mV
	Accuracy	<0.1% Umax
CR	Range	0.25-1500Ω
	Resolution	Min.0.01Ω
	Accuracy	(1/Rmin)*2%: (0.25~100Ω), (1/Rmin)*5%: (100~1500Ω)
CP	Range	0-200W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Dynamic mode	Rising slope	12A/ms
	Falling slope	12A/ms
	Min. rise time	1ms
Input Read-back		
Read-back current	Range	0-12A
	Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-150V
	Resolution	10mV
	Accuracy	<0.1% Umax
Read-back Resistance	Range	0.25-1500Ω
	Resolution	0.01Ω
	Accuracy	(1/Rmin)*2%: (0.25~100Ω), (1/Rmin)*5%: (100~1500Ω)

Read-back Power	Range	0-200W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Protection range		
OCP		12.5A
OVP		155V
OPP		210W
Short circuit test		
Current		13.2A
External analog (optional)		
Current programming		External 0V~10V is 0~12A
Current monitoring		External 0V~10V is 0~12A
Voltage programming		External 0V~10V is 0~150V
Voltage monitoring		External 0V~10V is 0~150V

Calculation method of resistance precision range in load mode: lower limit: 1/(1/R+(1/R)*0.05+0.004) ; Upper limit: 1/(1/R-(1/R)*0.05-0.004)

10.5 IT-M3623

Source Mode

Rated value (0-40 °C)	Output Voltage	0-150V
	Output Current	-12A~12A
	Output Power	-400W~400W
	Min. operating voltage	9V at -12A
CC	Range	-12A~12A
	Setup Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent

CV	Range	0-150V
	Setup Resolution	10mV
	Accuracy	<0.1% Umax
Output Resistance (positive current mode)	Range	0-1000mΩ
	Setup Resolution	0.1mΩ
	Accuracy	2%*Rmax
CP	Range	-400W~400W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Output Read-back		
Read-back current	Range	-12A~12A
	Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-150V
	Resolution	10mV
	Accuracy	<0.1% Umax
Read-back Power	Range	-400W~400W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Regulation		
Load Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Line Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Ripple		
Ripple	Voltage	≤300mVp-p
	Current	≤30mArms
value voltage rise/fall time		
Rise time	Voltage(No load)	20ms

Rise time	Voltage(Full load)	50ms
Fall time	Voltage(No load)	20ms
Fall time	Voltage(Full load)	20ms
Output Protection range		
OCP		-12.5A or 12.5A
OVP		155V
OPP		-410W or 410W
External analog (optional)		
Voltage programming		External 0V~10V is 0~150V
Voltage monitoring		External 0V~10V is 0~150V
Current programming		External -10V~10V is -12A~12A
Current monitoring		External -10V~10V is -12A~12A
AC parameters		
Voltage range		100VAC -240VAC
OVP		264VAC
UVP		90VAC
Frequency		47Hz~63Hz
Max. current (rms)		2Aac (AC220)
DC Offset		-0.1A~+0.1A
Environment		
Working temperature		0- 40 °C
Storage temperature		-20- 70℃
Noise		60dB
External temperature measurement		
Measurement range		-20℃——120℃
Measurement accuracy		±1℃
Measurement resolution		0.1℃
Efficiency		
Max. efficiency (Full-load)		88%
Communication (Optional)		
Communication interfaces		RS232/USB/RS485/CAN/LAN/GPIB/Analog
Mechanical parameters		

Size and weight	450mm*214mm*43.5mm
Net weight	5kg

Load Mode:

Parameter		IT-M3623 V1.2
Load Parameter		
Rated value(0 ℃-40 ℃)	Input Voltage	0-150V
	Input Current	0-12A
	Input Power	0-400W
	Min. operating voltage	2V at 12A
CC	Range	0-12A
	Setup Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-150V
	Setup Resolution	10mV
	Accuracy	<0.1% Umax
CR	Range	0.25-1500Ω
	Resolution	Min.0.01Ω
	Accuracy	(1/Rmin)*2%: (0.25~100Ω), (1/Rmin)*5%: (100~1500Ω)
CP	Range	0-400W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Dynamic mode	Rising slope	12A/ms
	Falling slope	12A/ms
	Min. rise time	1ms
Input Read-back		
Read-back current	Range	0-12A
	Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-150V
	Resolution	10mV

	Accuracy	<0.1% Umax
Read-back Resistance	Range	0.25-1500Ω
	Resolution	0.01Ω
	Accuracy	(1/Rmin)*2%: (0.25~100Ω), (1/Rmin)*5%: (100~1500Ω)
Read-back Power	Range	0-400W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Protection range		
OCP		12.5A
OVP		155V
OPP		410W
Short circuit test		
Current		13.2A
External analog (optional)		
Current programming		External 0V~10V is 0~12A
Current monitoring		External 0V~10V is 0~12A
Voltage programming		External 0V~10V is 0~150V
Voltage monitoring		External 0V~10V is 0~150V

Calculation method of resistance precision range in load mode: lower limit: 1/(1/R+(1/R)*0.05+0.004) ; Upper limit: 1/(1/R-(1/R)*0.05-0.004)

10.6 IT-M3633

Source Mode

Source Parameter		
Rated value (0-40 °C)	Output Voltage	0-150V
	Output Current	-12A~12A
	Output Power	-800W~800W

	Min. operating voltage	9V at -12A
CC	Range	-12A~12A
	Setup Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-150V
	Setup Resolution	10mV
	Accuracy	<0.1% Umax
Output Resistance (positive current mode)	Range	0-1000mΩ
	Setup Resolution	0.1mΩ
	Accuracy	2%*Rmax
CP	Range	-800W~800W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Output Read-back		
Read-back current	Range	-12A~12A
	Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-150V
	Resolution	10mV
	Accuracy	<0.1% Umax
Read-back Power	Range	-800W~800W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Regulation		
Load Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Line Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Ripple		
Ripple	Voltage	≤300mVp-p

	Current	≤30mArms
value voltage rise/fall time		
Rise time	Voltage(No load)	20ms
Rise time	Voltage(Full load)	50ms
Fall time	Voltage(No load)	20ms
Fall time	Voltage(Full load)	20ms
Output Protection range		
OCP		-12.5A or 12.5A
OVP		155V
OPP		-810W or 810W
External analog (optional)		
Voltage programming		External 0V~10V is 0~150V
Voltage monitoring		External 0V~10V is 0~150V
Current programming		External -10V~10V is -12A~12A
Current monitoring		External -10V~10V is -12A~12A
AC parameters		
Voltage range		100VAC -240VAC
OVP		264VAC
UVP		90VAC
Frequency		47Hz~63Hz
Max. current (rms)		4Aac (AC220)
Power factor PF		>0.98 (Lead or Lag)
DC Offset		-0.1A~+0.1A
Harmonic THDI		<5%
Environment		
Working temperature		0-40°C
Storage temperature		-20-70℃
Noise		60dB
External temperature measurement		
Measurement range		-20℃——120℃
Measurement accuracy		±1℃
Measurement resolution		0.1℃
Efficiency		
Max. efficiency (Full-load)		88%

Communication (Optional)	
Communication interfaces	RS232/USB/RS485/CAN/LAN/GPIB/Analog
Mechanical parameters	
Size and weight	450mm*214mm*43.5mm
Net weight	5kg

Load Mode

Load Parameter		
Rated value (0-40 °C)	Input Voltage	0-150V
	Input Current	0-12A
	Input Power	0-800W
	Min. operating voltage	2V at 12A
CC	Range	0-12A
	Setup Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-150V
	Setup Resolution	10mV
	Accuracy	<0.1% Umax
CR	Range	0.25-1500Ω
	Resolution	Min.0.01Ω
	Accuracy	(1/Rmin)*2%: (0.25~100Ω), (1/Rmin)*5%: (100~1500Ω)
CP	Range	0-800W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Dynamic mode	Rising slope	12A/ms
	Falling slope	12A/ms
	Min. rise time	1ms
Input Read-back		
Read-back current	Range	0-12A
	Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-150V

	Resolution	10mV
	Accuracy	<0.1% Umax
Read-back Resistance	Range	0.25-1500Ω
	Resolution	0.01Ω
	Accuracy	(1/Rmin)*2%: (0.25~100Ω), (1/Rmin)*5%: (100~1500Ω)
Read-back Power	Range	0-800W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Protection range		
OCP		12.5A
OVP		155V
OPP		810W
Short circuit test		
Current		13.2A
External analog (optional)		
Current programming		External 0V~10V is 0~12A
Current monitoring		External 0V~10V is 0~12A
Voltage programming		External 0V~10V is 0~150V
Voltage monitoring		External 0V~10V is 0~150V

Calculation method of resistance precision range in load mode: lower limit: 1/(1/R+(1/R)*0.05+0.004) ; Upper limit: 1/(1/R-(1/R)*0.05-0.004)

10.7 IT-M3614

Source Mode

Source Parameter		
Rated value (0-40 °C)	Output Voltage	0-300V
	Output Current	-6A~6A

	Output Power	-200W~200W
	Min. operating voltage	18V at -6A
CC	Range	-6A~6A
	Setup Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-300V
	Setup Resolution	10mV
	Accuracy	<0.1% Umax
Output Resistance (positive current mode)	Range	0-1000mΩ
	Setup Resolution	0.1mΩ
	Accuracy	2%*Rmax
CP	Range	-200W~200W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Output Read-back		
Read-back current	Range	-6A~6A
	Resolution	0.1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-300V
	Resolution	10mV
	Accuracy	<0.1% Umax
Read-back Power	Range	-200W~200W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Regulation		
Load Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Line Regulation	Voltage	≤0.05% Umax

	Current	≤0.05% Imax
Ripple		
Ripple	Voltage	≤600mVp-p
	Current	≤30mArms
value voltage rise/fall time		
Rise time	Voltage(No load)	20ms
Rise time	Voltage(Full load)	50ms
Fall time	Voltage(No load)	20ms
Fall time	Voltage(Full load)	20ms
Output Protection range		
OCP		-6.2A or 6.2A
OVP		305V
OPP		-210W or 210W
External analog (optional)		
Voltage programming		External 0V~10V is 0~300V
Voltage monitoring		External 0V~10V is 0~300V
Current programming		External -10V~10V is -6A~6A
Current monitoring		External -10V~10V is -6A~6A
AC parameters		
Voltage range		100VAC -240VAC
OVP		264VAC
UVP		90VAC
Frequency		47Hz~63Hz
Max. current (rms)		1Aac (AC220V)
DC Offset		-0.1A~+0.1A
Environment		
Working temperature		0- 40 °C
Storage temperature		-20- 70℃
Noise		60dB
External temperature measurement		
Measurement range		-20℃——120℃
Measurement accuracy		±1℃
Measurement resolution		0.1℃

Efficiency	
Max. efficiency (Full-load)	88%
Communication (Optional)	
Communication interfaces	RS232/USB/RS485/CAN/LAN/GPIB/Analog
Mechanical parameters	
Size and weight	450mm*214mm*43.5mm
Net weight	5kg

Load Mode:

Parameter		IT-M3614 V1.2
Load Parameter		
Rated value(0 ℃-40 ℃)	Input Voltage	0-300V
	Input Current	0-6A
	Input Power	0-200W
	Min. operating voltage	5V at 6A
CC	Range	0-6A
	Setup Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-300V
	Setup Resolution	10mV
	Accuracy	<0.1% Umax
CR	Range	1-3000Ω
	Resolution	Min.1Ω
	Accuracy	(1/Rmin)*2%: (1~300Ω), (1/Rmin)*5%: (300~3000Ω)
CP	Range	0-200W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Dynamic mode	Rising slope	6A/ms
	Falling slope	6A/ms
	Min. rise time	1ms

Input Read-back		
Read-back current	Range	0-6A
	Resolution	0.1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-300V
	Resolution	10mV
	Accuracy	<0.1% Umax
Read-back Resistance	Range	1-3000Ω
	Resolution	1Ω
	Accuracy	(1/Rmin)*2%: (1~300Ω), (1/Rmin)*5%: (300~3000Ω)
Read-back Power	Range	0-200W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Protection range		
OCP		6.2A
OVP		310V
OPP		210W
Short circuit test		
Current		6.6A
External analog (optional)		
Current programming		External 0V~10V is 0~6A
Current monitoring		External 0V~10V is 0~6A
Voltage programming		External 0V~10V is 0~300V
Voltage monitoring		External 0V~10V is 0~300V

Calculation method of resistance precision range in load mode: lower limit: 1/(1/R+(1/R)*0.05+0.004) ; Upper limit: 1/(1/R-(1/R)*0.05-0.004)

10.8 IT-M3624

Source Mode

Source Parameter		
Rated value (0-40 °C)	Output Voltage	0-300V
	Output Current	-6A~6A
	Output Power	-400W~400W
	Min. operating voltage	18V at -6A
CC	Range	-6A~6A
	Setup Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-300V
	Setup Resolution	10mV
	Accuracy	<0.1% Umax
Output Resistance (positive current mode)	Range	0-1000mΩ
	Setup Resolution	0.1mΩ
	Accuracy	2%*Rmax
CP	Range	-400W~400W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Output Read-back		
Read-back current	Range	-6A~6A
	Resolution	0.1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-300V
	Resolution	10mV
	Accuracy	<0.1% Umax
Read-back Power	Range	-400W~400W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Tempera-ture Coefficient	100ppm/℃

	Current Temperature Coefficient	50ppm/℃
Regulation		
Load Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Line Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Ripple		
Ripple	Voltage	≤600mVp-p
	Current	≤30mArms
value voltage rise/fall time		
Rise time	Voltage(No load)	20ms
Rise time	Voltage(Full load)	50ms
Fall time	Voltage(No load)	20ms
Fall time	Voltage(Full load)	20ms
Output Protection range		
OCP		-6.2A or 6.2A
OVP		305V
OPP		-410W or 410W
External analog (optional)		
Voltage programming		External 0V~10V is 0~300V
Voltage monitoring		External 0V~10V is 0~300V
Current programming		External -10V~10V is -6A~6A
Current monitoring		External -10V~10V is -6A~6A
AC parameters		
Voltage range		100VAC -240VAC
OVP		264VAC
UVP		90VAC
Frequency		47Hz~63Hz
Max. current (rms)		2Aac (AC220V)
DC Offset		-0.1A~+0.1A
Environment		
Working temperature		0- 40 °C
Storage temperature		-20- 70℃

Noise	60dB
External temperature measurement	
Measurement range	-20℃——120℃
Measurement accuracy	±1℃
Measurement resolution	0.1℃
Efficiency	
Max. efficiency (Full-load)	88%
Communication (Optional)	
Communication interfaces	RS232/USB/RS485/CAN/LAN/GPIB/Analog
Mechanical parameters	
Size and weight	450mm*214mm*43.5mm
Net weight	5kg

Load Mode

Parameter		IT-M3624 V1.2
Load Parameter		
Rated value(0 ℃-40 ℃)	Input Voltage	0-300V
	Input Current	0-6A
	Input Power	0-400W
	Min. operating voltage	5V at 6A
CC	Range	0-6A
	Setup Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-300V
	Setup Resolution	10mV
	Accuracy	<0.1% Umax
CR	Range	1-3000Ω
	Resolution	Min.1Ω
	Accuracy	(1/Rmin)*2%: (1~300Ω), (1/Rmin)*5%: (300~3000Ω)
CP	Range	0-400W

	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Dynamic mode	Rising slope	6A/ms
	Falling slope	6A/ms
	Min. rise time	1ms
Input Read-back		
Read-back current	Range	0-6A
	Resolution	0.1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-300V
	Resolution	10mV
	Accuracy	<0.1% Umax
Read-back Resistance	Range	1-3000Ω
	Resolution	1Ω
	Accuracy	(1/Rmin)*2%: (1~300Ω), (1/Rmin)*5%: (300~3000Ω)
Read-back Power	Range	0-400W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Protection range		
OCP		6.2A
OVP		310V
OPP		410W
Short circuit test		
Current		6.6A
External analog (optional)		
Current programming		External 0V~10V is 0~6A
Current monitoring		External 0V~10V is 0~6A
Voltage programming		External 0V~10V is 0~300V
Voltage monitoring		External 0V~10V is 0~300V

Calculation method of resistance precision range in load mode: lower limit: 1/(1/R+(1/R)*0.05+0.004) ; Upper limit: 1/(1/R-(1/R)*0.05-0.004)

10.9 IT-M3634

Source Mode

Source Parameter		
Rated value (0-40 °C)	Output Voltage	0-300V
	Output Current	-6A~6A
	Output Power	-800W~800W
	Min. operating voltage	18V at -6A
CC	Range	-6A~6A
	Setup Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-300V
	Setup Resolution	10mV
	Accuracy	<0.1% Umax
Output Resistance (positive current mode)	Range	0-1000mΩ
	Setup Resolution	0.1mΩ
	Accuracy	2%*Rmax
CP	Range	-800W~800W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Output Read-back		
Read-back current	Range	-6A~6A
	Resolution	0.1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-300V
	Resolution	10mV
	Accuracy	<0.1% Umax
Read-back Power	Range	-800W~800W
	Resolution	0.1W
	Accuracy	<1% Pmax

Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Regulation		
Load Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Line Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Ripple		
Ripple	Voltage	≤600mVp-p
	Current	≤30mArms
value voltage rise/fall time		
Rise time	Voltage(No load)	20ms
Rise time	Voltage(Full load)	50ms
Fall time	Voltage(No load)	20ms
Fall time	Voltage(Full load)	20ms
Output Protection range		
OCP		-6.2A or 6.2A
OVP		305V
OPP		-810W or 810W
External analog (optional)		
Voltage programming		External 0V~10V is 0~300V
Voltage monitoring		External 0V~10V is 0~300V
Current programming		External -10V~10V is -6A~6A
Current monitoring		External -10V~10V is -6A~6A
AC parameters		
Voltage range		100VAC -240VAC
OVP		264VAC
UVP		90VAC
Frequency		47Hz~63Hz
Max. current (rms)		4Aac (AC220V)
Power factor PF		>0.98 (Lead or Lag)
DC Offset		-0.1A~+0.1A

Harmonic THDI	<5%
Environment	
Working temperature	0- 40 ° C
Storage temperature	-20- 70℃
Noise	60dB
External temperature measurement	
Measurement range	-20℃——120℃
Measurement accuracy	±1℃
Measurement resolution	0.1℃
Efficiency	
Max. efficiency (Full-load)	88%
Communication (Optional)	
Communication interfaces	RS232/USB/RS485/CAN/LAN/GPIB/Analog
Mechanical parameters	
Size and weight	450mm*214mm*43.5mm
Net weight	5kg

Load Mode

Load Parameter		
Rated value (0-40 °C)	Input Voltage	0-300V
	Input Current	0-6A
	Input Power	0-800W
	Min. operating voltage	5V at 6A
CC	Range	0-6A
	Setup Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-300V
	Setup Resolution	10mV
	Accuracy	<0.1% Umax
CR	Range	1-3000Ω
	Resolution	Min. 1Ω
	Accuracy	(1/Rmin)*2%: (1~300Ω), (1/Rmin)*5%: (300~3000Ω)

CP	Range	0-800W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Dynamic mode	Rising slope	6A/ms
	Falling slope	6A/ms
	Min. rise time	1ms
Input Read-back		
Read-back current	Range	0-6A
	Resolution	0.1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-300V
	Resolution	10mV
	Accuracy	<0.1% Umax
Read-back Resistance	Range	1-3000Ω
	Resolution	1Ω
	Accuracy	(1/Rmin)*2%: (1~300Ω), (1/Rmin)*5%: (300~3000Ω)
Read-back Power	Range	0-800W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Protection range		
OCP		6.2A
OVP		310V
OPP		810W
Short circuit test		
Current		6.6A
External analog (optional)		
Current programming		External 0V~10V is 0~6A
Current monitoring		External 0V~10V is 0~6A
Voltage programming		External 0V~10V is 0~300V
Voltage monitoring		External 0V~10V is 0~300V

Calculation method of resistance precision range in load mode: lower limit: 1/(1/R+(1/R)*0.05+0.004) ; Upper limit: 1/(1/R-(1/R)*0.05-0.004)

10.10 IT-M3615

Source Mode

Source Parameter		
Rated value (0-40 °C)	Output Voltage	0-600V
	Output Current	-3A~3A
	Output Power	-200W~200W
	Min. operating voltage	36V at -3A
CC	Range	-3A~3A
	Setup Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-600V
	Setup Resolution	10mV
	Accuracy	<0.1% Umax
Output Resistance (positive current mode)	Range	0-1000mΩ
	Setup Resolution	0.1mΩ
	Accuracy	2%*Rmax
CP	Range	-200W~200W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Output Read-back		
Read-back current	Range	-3A~3A
	Resolution	0.1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-600V
	Resolution	10mV
	Accuracy	<0.1% Umax
Read-back Power	Range	-200W~200W

	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Regulation		
Load Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Line Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Ripple		
Ripple	Voltage	≤1200mVp-p
	Current	≤30mArms
value voltage rise/fall time		
Rise time	Voltage(No load)	30ms
Rise time	Voltage(Full load)	60ms
Fall time	Voltage(No load)	30ms
Fall time	Voltage(Full load)	30ms
Output Protection range		
OCP		-3.1A or 3.1A
OVP		610V
OPP		-210W or 210W
External analog (optional)		
Voltage programming		External 0V~10V is 0~600V
Voltage monitoring		External 0V~10V is 0~600V
Current programming		External -10V~10V is -3A~3A
Current monitoring		External -10V~10V is -3A~3A
AC parameters		
Voltage range		100VAC -240VAC
OVP		264VAC
UVP		90VAC

Frequency	47Hz~63Hz
Max. current (rms)	1Aac (AC220V)
DC Offset	-0.1A~+0.1A
Environment	
Working temperature	0- 40 °C
Storage temperature	-20- 70℃
Noise	60dB
External temperature measurement	
Measurement range	-20℃——120℃
Measurement accuracy	±1℃
Measurement resolution	0.1℃
Efficiency	
Max. efficiency (Full-load)	88%
Communication (Optional)	
Communication interfaces	RS232/USB/RS485/CAN/LAN/GPIB/Analog
Mechanical parameters	
Size and weight	450mm*214mm*43.5mm
Net weight	5kg

Load Mode:

Parameter		IT-M3615 V1.2
Load Parameter		
Rated value (0-40 °C)	Input Voltage	0-600V
	Input Current	0-3A
	Input Power	0-200W
	Min. operating voltage	10V at 3A
CC	Range	0-3A
	Setup Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-600V
	Setup Resolution	10mV

	Accuracy	<0.1% Umax
CR	Range	4-6000Ω
	Resolution	Min.1Ω
	Accuracy	(1/Rmin)*2%: (4~600Ω), (1/Rmin)*5%: (600~6000Ω)
CP	Range	0-200W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Dynamic mode	Rising slope	3A/ms
	Falling slope	3A/ms
	Min. rise time	1ms
Input Read-back		
Read-back current	Range	0-3A
	Resolution	0.1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-600V
	Resolution	10mV
	Accuracy	<0.1% Umax
Read-back Resistance	Range	4-6000Ω
	Resolution	4-6000Ω
	Accuracy	(1/Rmin)*2%: (4~600Ω), (1/Rmin)*5%: (600~6000Ω)
Read-back Power	Range	0-200W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Protection range		
OCP		3.1A
OVP		610V
OPP		210W
Short circuit test		

Current	3.3A
External analog (optional)	
Current programming	External 0V~10V is 0~3A
Current monitoring	External 0V~10V is 0~3A
Voltage programming	External 0V~10V is 0~600V
Voltage monitoring	External 0V~10V is 0~600V

Calculation method of resistance precision range in load mode: lower limit: 1/(1/R+(1/R)*0.05+0.004) ; Upper limit: 1/(1/R-(1/R)*0.05-0.004)

10.11 IT-M3625

Source Mode

Source Parameter		
Rated value (0-40 °C)	Output Voltage	0-600V
	Output Current	-3A~3A
	Output Power	-400W~400W
	Min. operating voltage	36V at -3A
CC	Range	-3A~3A
	Setup Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-600V
	Setup Resolution	10mV
	Accuracy	<0.1% Umax
Output Resistance (positive current mode)	Range	0-1000mΩ
	Setup Resolution	0.1mΩ
	Accuracy	2%*Rmax
CP	Range	-400W~400W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Output Read-back		
Read-back current	Range	-3A~3A

	Resolution	0.1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-600V
	Resolution	10mV
	Accuracy	<0.1% Umax
Read-back Power	Range	-400W~400W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Regulation		
Load Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Line Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Ripple		
Ripple	Voltage	≤1200mVp-p
	Current	≤30mArms
value voltage rise/fall time		
Rise time	Voltage(No load)	30ms
Rise time	Voltage(Full load)	60ms
Fall time	Voltage(No load)	30ms
Fall time	Voltage(Full load)	30ms
Output Protection range		
OCP		-3.1A or 3.1A
OVP		610V
OPP		-410W or 410W
External analog (optional)		
Voltage programming		External 0V~10V is 0~600V
Voltage monitoring		External 0V~10V is 0~600V

Current programming	External -10V~10V is -3A~3A
Current monitoring	External -10V~10V is -3A~3A
AC parameters	
Voltage range	100VAC -240VAC
OVP	264VAC
UVP	90VAC
Frequency	47Hz~63Hz
Max. current (rms)	2Aac (AC220V)
DC Offset	-0.1A~+0.1A
Environment	
Working temperature	0- 40 °C
Storage temperature	-20- 70℃
Noise	60dB
External temperature measurement	
Measurement range	-20℃——120℃
Measurement accuracy	±1℃
Measurement resolution	0.1℃
Efficiency	
Max. efficiency (Full-load)	88%
Communication (Optional)	
Communication interfaces	RS232/USB/RS485/CAN/LAN/GPIB/Analog
Mechanical parameters	
Size and weight	450mm*214mm*43.5mm
Net weight	5kg

Load Mode

Parameter		IT-M3625 V1.2
Load Parameter		
Rated value (0-40 °C)	Input Voltage	0-600V
	Input Current	0-3A
	Input Power	0-400W
	Min. operating voltage	10V at 3A

CC	Range	0-3A
	Setup Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-600V
	Setup Resolution	10mV
	Accuracy	<0.1% Umax
CR	Range	4-6000Ω
	Resolution	Min.1Ω
	Accuracy	(1/Rmin)*2%: (4~600Ω), (1/Rmin)*5%: (600~6000Ω)
CP	Range	0-400W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Dynamic mode	Rising slope	3A/ms
	Falling slope	3A/ms
	Min. rise time	1ms
Input Read-back		
Read-back current	Range	0-3A
	Resolution	0.1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-600V
	Resolution	10mV
	Accuracy	<0.1% Umax
Read-back Resistance	Range	4-6000Ω
	Resolution	4-6000Ω
	Accuracy	(1/Rmin)*2%: (4~600Ω), (1/Rmin)*5%: (600~6000Ω)
Read-back Power	Range	0-400W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃

Protection range	
OCP	3.1A
OVP	610V
OPP	410W
Short circuit test	
Current	3.3A
External analog (optional)	
Current programming	External 0V~10V is 0~3A
Current monitoring	External 0V~10V is 0~3A
Voltage programming	External 0V~10V is 0~600V
Voltage monitoring	External 0V~10V is 0~600V

Calculation method of resistance precision range in load mode: lower limit: 1/(1/R+(1/R)*0.05+0.004) ; Upper limit: 1/(1/R-(1/R)*0.05-0.004)

10.12 IT-M3635

Source Mode

Source Parameter		
Rated value (0-40 °C)	Output Voltage	0-600V
	Output Current	-3A~3A
	Output Power	-800W~800W
	Min. operating voltage	36V at -3A
CC	Range	-3A~3A
	Setup Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-600V
	Setup Resolution	10mV
	Accuracy	<0.1% Umax
Output Resistance (positive current mode)	Range	0-1000mΩ
	Setup Resolution	0.1mΩ
	Accuracy	2%*Rmax
CP	Range	-800W~800W

	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Output Read-back		
Read-back current	Range	-3A~3A
	Resolution	0.1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-600V
	Resolution	10mV
	Accuracy	<0.1% Umax
Read-back Power	Range	-800W~800W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃
	Current Temperature Coefficient	50ppm/℃
Regulation		
Load Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Line Regulation	Voltage	≤0.05% Umax
	Current	≤0.05% Imax
Ripple		
Ripple	Voltage	≤1200mVp-p
	Current	≤30mArms
value voltage rise/fall time		
Rise time	Voltage(No load)	30ms
Rise time	Voltage(Full load)	60ms
Fall time	Voltage(No load)	30ms
Fall time	Voltage(Full load)	30ms
Output Protection range		
OCP		-3.1A or 3.1A
OVP		610V
OPP		-810W or 810W

External analog (optional)	
Voltage programming	External 0V~10V is 0~600V
Voltage monitoring	External 0V~10V is 0~600V
Current programming	External -10V~10V is -3A~3A
Current monitoring	External -10V~10V is -3A~3A
AC parameters	
Voltage range	100VAC -240VAC
OVP	264VAC
UVP	90VAC
Frequency	47Hz~63Hz
Max. current (rms)	4Aac (AC220V)
Power factor PF	>0.98 (Lead or Lag)
DC Offset	-0.1A~+0.1A
Harmonic THDI	<5%
Environment	
Working temperature	0- 40 ° C
Storage temperature	-20- 70℃
Noise	60dB
External temperature measurement	
Measurement range	-20℃——120℃
Measurement accuracy	±1℃
Measurement resolution	0.1℃
Efficiency	
Max. efficiency (Full-load)	88%
Communication (Optional)	
Communication interfaces	RS232/USB/RS485/CAN/LAN/GPIB/Analog
Mechanical parameters	
Size and weight	450mm*214mm*43.5mm
Net weight	5kg

Load Mode

Load Parameter		
Rated value (0-40 °C)	Input Voltage	0-600V

	Input Current	0-3A
	Input Power	0-800W
	Min. operating voltage	10V at 3A
CC	Range	0-3A
	Setup Resolution	1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
CV	Range	0-600V
	Setup Resolution	10mV
	Accuracy	<0.1% Umax
CR	Range	4-6000Ω
	Resolution	Min.1Ω
	Accuracy	(1/Rmin)*2%: (4~600Ω), (1/Rmin)*5%: (600~6000Ω)
CP	Range	0-800W
	Setup Resolution	0.1W
	Accuracy	<1.0% Pmax
Dynamic mode	Rising slope	3A/ms
	Falling slope	3A/ms
	Min. rise time	1ms
Input Read-back		
Read-back current	Range	0-3A
	Resolution	0.1mA
	Accuracy	<0.1% Imax+0.1%Icurrent
Read-back Voltage	Range	0-600V
	Resolution	10mV
	Accuracy	<0.1% Umax
Read-back Resistance	Range	4-6000Ω
	Resolution	4-6000Ω
	Accuracy	(1/Rmin)*2%: (4~600Ω), (1/Rmin)*5%: (600~6000Ω)
Read-back Power	Range	0-800W
	Resolution	0.1W
	Accuracy	<1% Pmax
Temperature Coefficient		
Temperature Coefficient	Voltage Temperature Coefficient	100ppm/℃

	Current Temperature Coefficient	50ppm/℃
Protection range		
OCP		3.1A
OVP		610V
OPP		810W
Short circuit test		
Current		3.3A
External analog (optional)		
Current programming		External 0V~10V is 0~3A
Current monitoring		External 0V~10V is 0~3A
Voltage programming		External 0V~10V is 0~600V
Voltage monitoring		External 0V~10V is 0~600V

Calculation method of resistance precision range in load mode: lower limit: 1/(1/R+(1/R)*0.05+0.004) ; Upper limit: 1/(1/R-(1/R)*0.05-0.004)