

# DM series high-precision programmable DC power supply

1U half-width 1.7KW high power density



- High-precision
- Superior quality
- High power density

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### DM series high-precision programmable DC power supply



### Product introduction

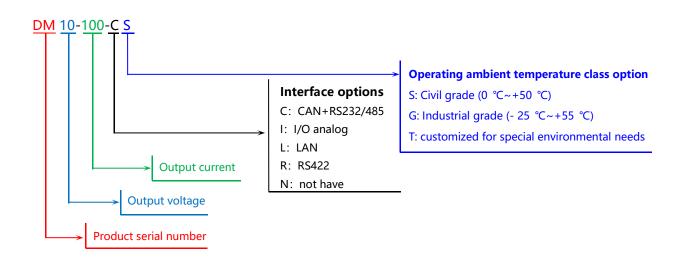
DM series high-precision programmable DC power supply is a cost-effective product with high-quality, high-power-density, multi-function, launched by our company to meet the needs of our customers. The specification voltage of this series of products can reach up to 2100V, and the maximum current can reach 180A. It built-in PFC power factor correction circuit, and the input voltage can meet the wide range of applications in the global power grid.

This series of power supply has constant voltage (CV) and constant current (CC) operating modes, and automatically switches between operating modes. It also has built-in user-settable constant power (CP) limit mode, built-in analog program control (5V/10V/5K/10K) signal, USB, LAN, CAN, RS-232/485 communication interface, and supports Modbus-RTU and SCPI industry standard communication protocol. Users can enter the menu to select their own protocol and communication mode as required.

□ 产品特点 Product features	
19" rack mount capability for ATE and OEM application	High resolution 16 bit ADC& DAC
Active PFC (0.98 typical)	■ LIST programming dynamic output
Output Voltage up to 2100V, Current up to 180A	CV/CC/CP operation modes
Optional LAN, RS-232&485, CAN, I/O analog interfaces	■ Voltage and current slope control
OLED display screen with 5-digit display	■ Internal resistance programming simulation
Finally set the memory function; Timer function	■ Support Modbus-RTU & SCPI industry communication protocols
Automatic start/safe start: user selectable	



### **Product selection function and optional model description**



Quick selection table		
600W series		
■ DM10-60===10V/60A/600W	■ DM80-7.5===80V/7.5A/600W	■ DM500-1.2===500V/1.2A/600W
■ DM20-30===20V/30A/600W	■ DM100-6===100V/6A/600W	■ DM600-1====600V/1A/600W
■ DM30-20===30V/20A/600W	■ DM150-4===150V/4A/600W	■ DM1000-0.6==1000V/0.6A/600W
■ DM40-15===40V/15A/600W	■ DM200-3===200V/3A/600W	■ DM1200-0.5==1200V/0.5A/600W
■ DM50-12===50V/12A/600W	■ DM300-2===300V/2A/600W	■ DM1500-0.5==1500V/0.5A/750W
■ DM60-10===60V/10A/600W	■ DM400-1.5==400V/1.5A/600W	■ DM2000-0.3==2000V/0.3A/600W
1000W series		
■ DM10-100==10V/100A/1000W	■ DM80-13====80V/13A/1040W	■ DM500-2====500V/2A/1000W
■ DM20-50===20V/50A/1000W	■ DM100-10===100V/10A/1000W	■ DM600-1.7===600V/1.7A/1020W
■ DM30-35===30V/35A/1050W	■ DM150-7====150V/7A/1050W	■ DM1000-1===1000V/1A/1000W
■ DM40-25===40V/25A/1000W	■ DM200-5====200V/5A/1000W	■ DM1200-1===1200V/1A/1200W
■ DM50-20===50V/20A/1000W	■ DM300-3.5===300V/3.5A/1050W	■ DM1500-0.7==1500V/0.7A/1050W
■ DM60-17===60V/17A/1020W	■ DM400-2.5===400V/2.5A/1000W	■ DM2000-0.5==2000V/0.5A/1000W

1700W	series
DM10 1	70

DM10-170===10V/170A/1700W	DM80-21====80V/21A/1680W
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■ DM500-3.4===500V/3.4A/1700W

■ DM20-85====20V/85A/1700W

■ DM100-17===100V/17A/1680W

■ DM600-2.8===600V/2.8A/1680W

■ DM30-56====30V/56A/1680W

\_\_\_\_\_\_ ■ DM150-11.2==150V/11.2A/1680W

■ DM1000-1.7==1000V/1.7A/1700W

■ DM40-42====40V/42A/1680W

■ DM200-8.5===200V/8.5A/1700W

DM1200-1.4==1200V/1.4A/1680W

■ DM50-34====50V/34A/1700W

DM300-5.6===300V/5.6A/1680W

■ DM1500-1.1==1500V/1.1A/1650W

■ DM60-28====60V/28A/1680W

■ DM400-4.2===400V/4.2A/1680W

DM2000-0.85=2000V/0.85A/1700W

Note: Please determine the model suffix letter based on the communication interface type and temperature level requirements, when you place an order.

### **Specifications**



### DM 600W series technical indicators (10V-200V)

				marcato	(							
OUTPUT RATIN	G		10-60	20-30	30-20	40-15	50-12	60-10	80-7.5	100-6	150-4	200-3
Voltage adjustable	range (*1)	V	0~10.5	0~21	0~32	0 ~ 42	0 ~ 53	0 ~ 63	0 ~ 84	0~105	0 ~ 158	0~210
Current adjustable	range (*2)	A	0 ~ 63	0~32	0~21	0~16	0~13	0~11	0~8	0 ~ 6.5	0~4.5	0~3.3
Rated power (OPP=105% of rate	ed value)	W	600	600	600	600	600	600	600	600	600	600
INPUT CHARAC	TERISTICS		10-60	20-30	30-20	40-15	50-12	60-10	80-7.5	100-6	150-4	200-3
Input voltage/frequ	iency		A: Single pha	se 85~265Vac								
Power Factor (Typ	)		0.99@100Vac	0.98@200Vac,	rated output pow	er.						
Efficiency at 100V rated output	ac/200Vac,	%	85/87	86/88	86/88	86/88	86/88	86/88	86/88	87/89	87/89	87/89
CONSTANT VOI	LTAGE MOI	DE	10-60	20-30	30-20	40-15	50-12	60-10	80-7.5	100-6	150-4	200-3
Max. Line regulation	on (*3)		0.01% of rated	output voltage								
Max. Line regulation	on (*4)		0.01% of rated	output voltage+	5mV							
Ripple and noise (p	o-p, 20MHz)	mV	75	80	80	80	80	100	100	120	120	150
Ripple r.m.s. 5Hz~	Ripple r.m.s. 5Hz~1MHz		10	12	12	12	12	20	20	20	20	30
Temperature coeffi	icient		50PPM/°C from rated output voltage, following 30 minutes warm-up.									
Temperature stabili	ity		0.01% of rated Vout over 8hrs interval following 30 minutes warm-up. Constant line, load & temp.									
Warm-up drift			Less than 0.01% of rated output voltage+2mV over 30 minutes following power on.									
Sense compensatio	n (*5)	V	2	2	5	5	5	5	5	5	5	5
Rise response time	(*6)	mS	20	20	20	20	20	20	20	25	50	50
Fall response	Full load	mS	30	30	60	60	60	60	60	60	120	120
time (*7)	No load	mS	600	1000	1500	2000	2500	2700	3000	3600	3900	4500
Transient response	time	mS	≤2mS (Time	for output voltage	e to recover with	in 0.5% of its rat	ed output for a lo	ad change 10~90	% of rated outpu	it current. )	•	•
Start up delay		<b>≤</b>	6S (Turn on t	he power switch,	the time when the	ne power starts an	nd enters standby	mode)				
CONSTANT CUE	RRENT MOD	)E	10-60	20-30	30-20	40-15	50-12	60-10	80-7.5	100-6	150-4	200-3
Max. Line regulation	on (*3)		0.05% of rated	output current.								
Max. Line regulation				8A: 0.08% of rat	ed output curren	t; Models within	8A: 0.02% of rat	ed output current	t+5mA			
Ripple r.m.s. 5Hz~	1MHz	mA	≤300	≤100	≤60	≤50	≤35	≤20	≤15	≤15	≤10	≤10
Temperature coeffi	cient			i odel: 100PPM/°C nodel : 70PPM/°C					<u>I</u>	1	I	I.
Temperature stabili	ity			l Iout over 8hrs. i				•	erature.			
Warm-up drift				odel: Less than ±0 nodel: Less than ±								

ANALOG PROGRAMMING	AND M	ONITORING (	ISOLATED FRO	OM THE OUT	PUT) (Optiona	1)					
Vout voltage programming		0~100%, 0~5\	/ or 0~10V, user	selectable. Accu	racy and linearity	: ±0.15% of rate	d Vout.				
Iout voltage programming		0~100%, 0~5\	/ or 0~10V, user	selectable. Accu	racy and linearity	: $\pm 0.4\%$ of rated	Iout.				
Vout resistor programming		0~100%, 0~5/	00%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Vout.								
Iout resistor programming		0~100%, 0~5/	00%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Iout.								
Output voltage monitor		0~5V or 0~10	V, user selectable	. Accuracy: ±0.5	% of rated Vout.						
Output current monitor		0~5V or 0~10	V, user selectable	. Accuracy: ±0.5	% of rated Iout.						
Remote switch on/off		High and low	level or dry conta	act signal control	power switch						
FUNCTIONS AND FEATURE	ES										
Series/parallel operation			parallel operatio ter-slave operation		ecification and m	odel to expand ve	oltage, current an	d power; Paralle	l connection is us	sed for automatic	current
Constant power control			_		set to achieve cor	nstant power mod	de				
Output resistance control		Emulates serie	s resistance. Res	istance range: 1~	-1000mΩ.						
Voltage and current slope control		Programmable	output rise and	fall slopes. Progr	amming range: 0	.0001~999.9V/m	S or A/mS				
LIST dynamic output		Four LIST pro	gram files can be	saved, and each	file can edit up t	o 200 steps of da	ita: There are thre	e execution mod	les: count, loop a	nd single step.	
Timer function		0-9999 minute		-,	up t		,		, roop u	o	
Quick data storage/recall				nly used working	g data of voltage,	current and othe	r parameters, and	can be quickly a	accessed through	the digital buttor	ns on the panel
Protection function		_	ltage protection,		ection, overload p						
DIGITAL PROGRAM CONT	'ROI	10-60	20-30	30-20	40-15	50-12	60-10	80-7.5	100-6	150-4	200-3
Vout programming accuracy			output voltage	30-20	40-13	30-12	00-10	00-7.5	100-0	130-4	200-3
Iout programming accuracy				ated output curre	ent; Models abov	ve 10A · 0.1% of	f rated output cur	rent			
Vout programming resolution			d output voltage	area output curre	int, Models doo	0.170 0.	raica output cur	· Cit			
Iout programming resolution			d output current								
Vout readback accuracy			l output voltage								
Iout readback accuracy				atad autmut aum	mt: Madala ahar	ra 10A : 0 19/ ad	funtad autmut aum	uant.			
Vout readback resolution					ent; Models abov		· ·		0.0110/	0.0070/	0.0050/
(of rated output voltage)  Iout readback resolution	F.S.	0.011%	0.006%	0.004%	0.003%	0.002%	0.002%	0.002%	0.011%	0.007%	0.005%
(of rated output current))	F.S.	0.002%	0.004%	0.006%	0.008%	0.009%	0.011%	0.015%	0.020%	0.030%	0.040%
Communication interface		Built-in USB i	nterface, optiona	l CAN & RS-232	&RS-485, I/O an	alog, LAN, RS-4	422; Supports Mo	dbus-RTU and S	SCPI industry sta	ndard communic	ation protocols
FRONT PANEL MONITORIN	NG AND	CONTROL									
Operation mode		Programmer k	nob,digital key a	nd multi-function	n key						
Display		5 digits OLED	screen displays	output voltage, c	urrent, power, wo	orking status and	other information	n; Support Chine	se and English m	enu switching d	isplay.
Voltage display accuracy		0.05% of rated	l output voltage±	1 count.							
Current display accuracy		Models within	10A: 0.2% of r	ated output curre	ent±1count; Mod	dels above 10A:	0.1% of rated ou	tput current±1co	ount		
Voltage setting accuracy		0.05% of rated	l output voltage								
Current setting accuracy		Models within	10A: 0.2% of r	ated output curre	ent; Models abov	ve 10A: 0.1% of	f rated output cur	rent			
Setpoint resolution		5 digits OLED	; display forma	nt: 99999, curren	t value decreases	by one digit, dec	imal point autom	atically increase	s by one digit, ma	aximum resolutio	on: 1mV; 1mA
Display value resolution		5 digits OLED	; display forma	at: 99999, curren	t value decreases	by one digit, dec	imal point autom	atically increase	s by one digit, ma	aximum resolutio	on: 1mV; 1mA
ENVIRONMENT APPLICAB	ILITY										
Operating temperature	°C	S: Civil grade	e (0°C ~ +50°C)	; G: Industria	al grade (-25°C	~+55°C)					
Storage temperature	°C				rial grade (-30°C						
Operating humidity	%	_	no condensation)		<u> </u>	•					
Storage humidity	%	`	no condensation)								
Cooling			·		ection: from Fron	t panel to power	supply rear				
MECHANICAL	'										
MECHANICAL		W 015 T	5 D 445 777	.1 1 ::	1 .						
Dimensions (WxHxD)	mm		.5, D: 446 (Witho	out busbars and b	ousbars cover)						
Weight	Kg	About 3Kg									



## DM 600W series technical indicators (300V-2000V)

OUTPUT RATING         300-2         400-1.5         500-1.2         600-1         1000-0.6         1200-0.5           Voltage adjustable range (*1)         V         0 ~ 315         0 ~ 420         0 ~ 525         0 ~ 630         0 ~ 1050         0 ~ 1260           Current adjustable range (*2)         A         0 ~ 2.1         0 ~ 1.5         0 ~ 1.3         0 ~ 1.1         0 ~ 0.66         0 ~ 0.55           Rated power (OPP=105% of rated value)         W         600         600         600         600         600         600         600										
Current adjustable range (*2) A 0~2.1 0~1.5 0~1.3 0~1.1 0~0.66 0~0.55  Rated power (OPP=105% of rated value) W 600 600 600 600 600 600	5 1500-0.5	2000-0.3								
Rated power (OPP=105% of rated value) W 600 600 600 600 600 600 600	0 ~ 1575	0~2100								
rated value) W 600 600 600 600 600 600	0 ~ 0.55	0 ~ 0.33								
INDUT CHARACTERISTICS 200.2 400.15 500.12 (00.1 1000.0 C 1000.0 C	750	600								
INPUT CHARACTERISTICS 300-2 400-1.5 500-1.2 600-1 1000-0.6 1200-0.5	5 1500-0.5	2000-0.3								
Input voltage/frequency A: Single phase 85Vac~265Vac / 47~63Hz										
Power Factor (Typ) 0.99@100Vac 0.98@200Vac, rated output power.										
Efficiency at 100Vac/200Vac, 76 87/89 87/89 87/89 87/89 87/89 87/89 87/89	87/89	87/89								
CONSTANT VOLTAGE MODE 300-2 400-1.5 500-1.2 600-1 1000-0.6 1200-0.5	5 1500-0.5	2000-0.3								
Max. Line regulation (*3) 0.01% of rated output voltage										
Max. Load regulation (*4) 0.01% of rated output voltage+5mV										
Ripple and noise (p-p, 20MHz) mV 150 250 450 500 650 700	1000	1500								
Ripple r.m.s. 5Hz~1MHz mV 30 50 90 100 150 170	200	300								
Temperature coefficient 50PPM/°C from rated output voltage, following 30 minutes warm-up.										
Temperature stability 0.01% of rated Vout over 8hrs interval following 30 minutes warm-up. Constant line, load & temp.										
Warm-up drift Less than 0.01% of rated output voltage+2mV over 30 minutes following power on.										
Sense compensation (*5) V 5 5 5										
Rise response time (*6) mS 100 100 100 100 100 150	150	150								
Fall response         Full load         mS         220         220         200         200         200         220	220	250								
time (*7) No load mS 4600 4600 5000 5500 5500 6500	7000	8000								
Transient response time mS ≤2mS (Time for output voltage to recover within 0.5% of its rated output for a load change 10~90% of rated output control of the	current. )									
Start up delay ≤ 6S (Turn on the power switch, the time when the power starts and enters standby mode)	6S (Turn on the power switch, the time when the power starts and enters standby mode)									
CONSTANT CURRENT MODE 300-2 400-1.5 500-1.2 600-1 1000-0.6 1200-0.5	5 1500-0.5	2000-0.3								
Max. Line regulation (*3) 0.02% of rated output current. +2mA										
Max. Line regulation 0.02% of rated output current. +5mA	0.02% of rated output current. +5mA									
Ripple r.m.s. 5Hz~1MHz         mA         ≤10         ≤10         ≤10         ≤5         ≤5	≤5	≤5								
Temperature coefficient 70PPM/°C from rated output current, following 30 minutes warm-up.	70PPM/°C from rated output current, following 30 minutes warm-up.									
Temperature stability 0.01% of rated Iout over 8hrs. interval following 30 minutes warm-up. Constant line, load & temperature.	0.01% of rated Iout over 8hrs. interval following 30 minutes warm-up. Constant line, load & temperature.									
Warm-up drift Less than ±0.15% of rated output current over 30 minutes following power on.	Less than ±0.15% of rated output current over 30 minutes following power on.									
ANALOG PROGRAMMING AND MONITORING (ISOLATED FROM THE OUTPUT) (Optional)										
Vout voltage programming 0~100%, 0~5V or 0~10V, user selectable. Accuracy and linearity: ±0.15% of rated Vout.										
	0~100%, 0~5V or 0~10V, user selectable. Accuracy and linearity: ±0.4% of rated Iout.									
Iout voltage programming 0~100%, 0~5V or 0~10V, user selectable. Accuracy and linearity: ±0.4% of rated Iout.	0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Vout.									
	0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Iout.									
Vout resistor programming 0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Vout.	$0\sim5V$ or $0\sim10V$ , user selectable. Accuracy: $\pm0.5\%$ of rated Vout.									
Vout resistor programming 0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Vout.  Iout resistor programming 0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Iout.										
Vout resistor programming 0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Vout.  Iout resistor programming 0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Iout.										
Vout resistor programming       0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Vout.         Iout resistor programming       0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Iout.         Output voltage monitor       0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Vout.										
Vout resistor programming       0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Vout.         Iout resistor programming       0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Iout.         Output voltage monitor       0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Vout.         Output current monitor       0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Iout.										
Vout resistor programming       0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Vout.         Iout resistor programming       0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Iout.         Output voltage monitor       0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Vout.         Output current monitor       0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Iout.         Remote switch on/off       High and low level or dry contact signal control power switch	connection is used for autor	natic current								
Vout resistor programming       0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Vout.         Iout resistor programming       0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Iout.         Output voltage monitor       0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Vout.         Output current monitor       0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Iout.         Remote switch on/off       High and low level or dry contact signal control power switch         FUNCTIONS AND FEATURES         Support series/parallel operation of the same specification and model to expand voltage, current and power; Parallel operation	connection is used for autor	natic current								
Vout resistor programming 0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Vout.  Tout resistor programming 0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Iout.  Output voltage monitor 0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Vout.  Output current monitor 0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Iout.  Remote switch on/off High and low level or dry contact signal control power switch  FUNCTIONS AND FEATURES  Series/parallel operation Support series/parallel operation of the same specification and model to expand voltage, current and power; Parallel or sharing in master-slave operation mode.	connection is used for autor	natic current								
Vout resistor programming       0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Vout.         Output voltage monitor       0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Vout.         Output current monitor       0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Iout.         Remote switch on/off       High and low level or dry contact signal control power switch         FUNCTIONS AND FEATURES         Series/parallel operation       Support series/parallel operation of the same specification and model to expand voltage, current and power; Parallel of sharing in master-slave operation mode.         Constant power control       The power within the rated power range can be set to achieve constant power mode         Output resistance control       Emulates series resistance. Resistance range: 1~1000mΩ.         Voltage and current slope control       Programmable output rise and fall slopes. Programming range: 0.0001~999.9V/mS or A/mS										
Vout resistor programming 0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Vout.  Output voltage monitor 0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Vout.  Output current monitor 0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Iout.  Remote switch on/off High and low level or dry contact signal control power switch  FUNCTIONS AND FEATURES  Series/parallel operation Support series/parallel operation of the same specification and model to expand voltage, current and power; Parallel of sharing in master-slave operation mode.  Constant power control The power within the rated power range can be set to achieve constant power mode  Output resistance control Emulates series resistance. Resistance range: 1~1000mΩ.  Voltage and current slope control Programmable output rise and fall slopes. Programming range: 0.0001~999.9V/mS or A/mS  LIST dynamic output Four LIST program files can be saved, and each file can edit up to 200 steps of data; There are three execution modes.										
Vout resistor programming        0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Vout.         Output voltage monitor        0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Vout.         Output current monitor        0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Iout.         Remote switch on/off        High and low level or dry contact signal control power switch         FUNCTIONS AND FEATURES         Series/parallel operation        Support series/parallel operation of the same specification and model to expand voltage, current and power; Parallel of sharing in master-slave operation mode.         Constant power control        The power within the rated power range can be set to achieve constant power mode         Output resistance control        Emulates series resistance. Resistance range: 1~1000mΩ.         Voltage and current slope control        Programmable output rise and fall slopes. Programming range: 0.0001~999.9V/mS or A/mS         LIST dynamic output        Four LIST program files can be saved, and each file can edit up to 200 steps of data; There are three execution modes: 10-9999 minutes can be set	: count, loop and single ste	р.								
Vout resistor programming        0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Vout.         Output voltage monitor        0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Vout.         Output current monitor        0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Iout.         Remote switch on/off        High and low level or dry contact signal control power switch         FUNCTIONS AND FEATURES         Series/parallel operation        Support series/parallel operation of the same specification and model to expand voltage, current and power; Parallel of sharing in master-slave operation mode.         Constant power control        The power within the rated power range can be set to achieve constant power mode         Output resistance control        Emulates series resistance. Resistance range: 1~1000mΩ.         Voltage and current slope control        Programmable output rise and fall slopes. Programming range: 0.0001~999.9V/mS or A/mS         LIST dynamic output        Four LIST program files can be saved, and each file can edit up to 200 steps of data; There are three execution modes:	count, loop and single ste	p. uttons on the panel								

# Hangzhou Jingri Technology Co., Ltd.

DIGITAL PROGRAM CONT	ROL	300-2	400-1.5	500-1.2	600-1	1000-0.6	1200-0.5	1500-0.5	2000-0.3			
Vout programming accuracy		0.05% of rated outp	05% of rated output voltage									
Iout programming accuracy		0.5% of rated outpo	.5% of rated output current									
Vout programming resolution		0.002% of rated ou	002% of rated output voltage									
Iout programming resolution		0.002% of rated ou	0.002% of rated output current									
Vout readback accuracy		0.05% of rated out	out voltage									
Iout readback accuracy		0.5% of rated outpo	ut current									
Vout readback resolution (of rated output voltage)	F.S.	0.004%	0.003%	0.003%	0.002%	0.011%	0.010%	0.007%	0.006%			
Iout readback resolution (of rated output current))	F.S.	0.006%	0.005%	0.010%	0.011%	0.020%	0.025%	0.025%	0.040%			
Communication interface		Built-in USB interf	face, optional CAN 8	RS-232&RS-485, I/	O analog, LAN, RS-4	22; Supports Modbu	s-RTU and SCPI indu	ustry standard commu	inication protocols			

FRONT PANEL MONITORIN	FRONT PANEL MONITORING AND CONTROL								
Operation mode		Programmer knob,digital key and multi-function key							
Display		5 digits OLED screen displays output voltage, current, power, working status and other information; Support Chinese and English menu switching display.							
Voltage display accuracy		0.05% of rated output voltage±1count.							
Current display accuracy		0.5% of rated output current±1count.							
Voltage setting accuracy		0.05% of rated output voltage							
Current setting accuracy		0.5% of rated output current							
Setpoint resolution		5 digits OLED: display format: 99999, current value decreases by one digit, decimal point automatically increases by one digit, maximum resolution: 1mV; 1mA							
Display value resolution		5 digits OLED: display format: 99999, current value decreases by one digit, decimal point automatically increases by one digit, maximum resolution: 1mV;0.1mA							

ENVIRONMENT APPLICAB	ENVIRONMENT APPLICABILITY							
Operating temperature	°C	S: Civil grade $(0^{\circ}\text{C} \sim +50^{\circ}\text{C})$ ; G: Industrial grade $(-25^{\circ}\text{C} \sim +55^{\circ}\text{C})$						
Storage temperature	°C	S: Civil grade $(-20^{\circ}\text{C} \sim +70^{\circ}\text{C})$ ; G: Industrial grade $(-30^{\circ}\text{C} \sim +85^{\circ}\text{C})$						
Operating humidity	%	20~90% RH (no condensation).						
Storage humidity	%	10~95% RH (no condensation).						
Cooling		Forced air cooling by internal fans. Air flow direction: from Front panel to power supply rear						

MECHANICAL								
Dimensions (WxHxD) mm W: 215, H: 43.5, D: 446(Without busbars and busbars cover),								
Weight	Kg	About 3Kg						

# ■ DM1000W 系列技术指标 (10V-200V)

OUTPUT RATIN	NG		10-100	20-50	30-35	40-25	50-20	60-17	80-13	100-10	150-7	200-5	
Voltage adjustable range (*1)		V	0~10.5	0~21	0~32	0~42	0~53	0 ~ 63	0~84	0~105	0~158	0~210	
Current adjustable		A	0 ~ 105	0 ~ 53	0~37	0~27	0~21	0~18	0~14	0~11	0 ~ 7.5	0 ~ 5.5	
Rated power (OPP=105% of rat		W	1000	1000	1050	1000	1000	1020	1040	1000	1050	1000	
INPUT CHARACTERISTICS			10-100	20-50	30-35	40-25	50-20	60-17	80-13	100-10	150-7	200-5	
Input voltage/frequ	uency		85Vac~265Va	c / 47~63Hz		1							
Power Factor (Typ	p)		0.99@100Vac	0.98@200Vac,	rated output pow	er.							
Efficiency at 100Vac/200Vac, rated output		%	85/87	86/88	86/88	86/88	86/88	86/88	86/88	87/89	87/89	87/89	
CONSTANT VOLTAGE MODE			10-100	20-50	30-35	40-25	50-20	60-17	80-13	100-10	150-7	200-5	
Max. Line regulation (*3)			0.01% of rated output voltage										
Max. Line regulati	ion (*4)		0.01% of rated output voltage+5mV										
Ripple and noise (J	p-p, 20MHz)	mV	75	80	80	80	80	100	100	120	120	150	
Ripple r.m.s. 5Hz~	-1MHz	mV	10	12	12	12	12	20	20	20	20	30	
Temperature coeff	icient		50PPM/°C from rated output voltage, following 30 minutes warm-up.										
Temperature stabil	lity		0.01% of rated	0.01% of rated Vout over 8hrs interval following 30 minutes warm-up. Constant line, load & temp.									
Warm-up drift			Less than 0.01	Less than 0.01% of rated output voltage+2mV over 30 minutes following power on.									
Sense compensation	on (*5)	V	2	2	5	5	5	5	5	5	5	5	
Rise response time	e (*6)	mS	20	20	20	20	20	20	20	25	50	50	
Fall response	Full load	mS	30	30	60	60	60	60	60	60	120	120	
time (*7)	No load	mS	600	1000	1500	2000	2500	2700	3000	3600	3900	4500	
Transient response	time	mS	≤2mS (Time	for output voltage	to recover with	in 0.5% of its rat	ed output for a lo	ad change 10~90	% of rated outpu	it current. )			
Start up delay		<u> </u>	6S (Turn on t	he power switch,	6S (Turn on the power switch, the time when the power starts and enters standby mode)								

Cooling

MECHANICAL

Dimensions (WxHxD)

CONSTANT CURRENT MOI	)E	10-100	20-50	30-35	40-25	50-20	60-17	80-13	100-10	150-7	200-5		
	)E 			30-33	40-23	30-20	00-17	80-13	100-10	130-7	200-3		
Max. Line regulation (*3)			0.05% of rated output current.  Models above 8A: 0.08% of rated output current; Models within 8A: 0.02% of rated output current+5mA										
Max. Line regulation									<15	<10	-10		
Ripple r.m.s. 5Hz~1MHz	mA	≤300	≤100	≤60	≤50	≤35	≤20	≤15	≤15	≤10	≤10		
Temperature coefficient			om rated output of			-	1 10.						
Temperature stability			l Iout over 8hrs. i			•	ine, load & temp	erature.					
Warm-up drift		Less than ±0.1	5% of rated outp	ut current over 3	0 minutes follow	ing power on.							
ANALOG PROGRAMMING	AND M	ONITORING (	ISOLATED FRO	OM THE OUTP	UT) (Optiona	ıl)							
Vout voltage programming		0~100%, 0~5\	V or 0~10V, user	selectable. Accur	acy and linearity	: ±0.15% of rated	l Vout.						
Iout voltage programming		0~100%, 0~5\	V or 0~10V, user	selectable. Accur	acy and linearity	: ±0.4% of rated	Iout.						
Vout resistor programming		0~100%, 0~5/	10Kohm full scal	le, user selectable	e. Accuracy and l	inearity: ±0.5% c	of rated Vout.						
Iout resistor programming		0~100%, 0~5/	10Kohm full scal	le, user selectable	e. Accuracy and l	inearity: ±0.5% c	of rated Iout.						
Output voltage monitor			V, user selectable			<u> </u>							
Output current monitor			V, user selectable										
Remote switch on/off			level or dry conta	-									
		Trigir and row	iover or any conta	er signar control	power switch								
FUNCTIONS AND FEATURI	ES												
Series/parallel operation			/parallel operation ster-slave operation		ecification and m	odel to expand vo	oltage, current an	d power; Paralle	l connection is us	sed for automatic	current		
Constant power control			thin the rated pow		set to achieve con	nstant power mod	le						
Output resistance control		Emulates serie	es resistance. Resi	istance range: 1~	1000mΩ.								
Voltage and current slope		Programmable	mulates series resistance. Resistance range: 1~1000mΩ.  rogrammable output rise and fall slopes. Programming range: 0.0001~999.9V/mS or A/mS										
Control  LIST dynamic cutmut		_											
LIST dynamic output		-	Four LIST program files can be saved, and each file can edit up to 200 steps of data; There are three execution modes: count, loop and single step.										
Timer function			0-9999 minutes can be set										
Quick data storage/recall		_	It can store 4 groups of commonly used working data of voltage, current and other parameters, and can be quickly accessed through the digital buttons on the panel Output overvoltage protection, overcurrent protection, overload protection, over-temperature protection, short circuit protection, input undervoltage protection,										
Protection function			overvoltage protection, overcurrent protection, overload protection, over-temperature protection, short enemit protection, input undervoltage protection, over-temperature protection, short enemit protection, over-temperature protection, short enemit protection, input undervoltage protection, over-temperature protection, short enemit protection, shor										
DIGITAL PROGRAM CONT	ROL	10-100	20-50	30-35	40-25	50-20	60-17	80-13	100-10	150-7	200-		
Vout programming accuracy		0.05% of rated	l output voltage										
Iout programming accuracy		Models within	10A: 0.2% of r	ated output curre	nt; Models abo	ve 10A: 0.1% of	rated output cur	rent					
Vout programming resolution			ed output voltage		-		•						
Iout programming resolution			ed output current										
Vout readback accuracy			d output voltage										
Iout readback accuracy			10A: 0.2% of r	roted output ourre	nt: Models abo	za 104 : 0 1% of	Frotad output our	rant					
Vout readback resolution									0.0110/	0.0070/	0.005		
(of rated output voltage)	F.S.	0.011%	0.006%	0.004%	0.003%	0.002%	0.002%	0.002%	0.011%	0.007%	0.005		
Iout readback resolution (of rated output current))	F.S.	0.011%	0.003%	0.003%	0.005%	0.006%	0.007%	0.010%	0.011%	0.002%	0.002		
Communication interface		Built-in USB i	interface, optiona	I CAN&RS-232	&RS-485, I/O ar	nalog, LAN, RS-4	22; Supports Mo	odbus-RTU and S	SCPI industry sta	ndard communica	ation proto		
FRONT PANEL MONITORI	NG AND	CONTROL											
Operation mode		1	nob,digital key a	nd multi-function	ı kev								
•		-	screen displays		-	alring status and	othan information	nı Cummant China	sa and English m	anu avritahina di	anlar.		
Display					urrent, power, we	orking status and	omer imormano	n, support Chine	se and English ii	ienu switching di	spiay.		
Voltage display accuracy			d output voltage±				0.407 0 . 1						
Current display accuracy			10A: 0.2% of r	ated output curre	nte±1count; Mo	odels above 10A:	0.1% of rated of	output currente±1	count.				
Voltage setting accuracy			l output voltage										
Current setting accuracy			Models within 10A: 0.2% of rated output current; Models above 10A: 0.1% of rated output current										
Setpoint resolution		5 digits OLED	5 digits OLED: display format: 99999, current value decreases by one digit, decimal point automatically increases by one digit, maximum resolution: 1mV; 1mA										
Display value resolution		5 digits OLED	5 digits OLED: display format: 99999, current value decreases by one digit, decimal point automatically increases by one digit, maximum resolution: 1mV;1mA										
	ILITY												
ENVIRONMENT APPLICAB			C. Ciril and (000 15000) · C. Industrial and (13500 15500)										
	°C	S: Civil orade	e (0°C~+50°C)	: G: Industria	ll grade (-25°C	~ +55°C)	S: Civil grade $(0^{\circ}\text{C} \sim +50^{\circ}\text{C})$ ; G: Industrial grade $(-25^{\circ}\text{C} \sim +55^{\circ}\text{C})$						
Operating temperature	°C												
ENVIRONMENT APPLICAB Operating temperature Storage temperature Operating humidity	°C °C	S: Civil grade	e $(0^{\circ}\text{C} \sim +50^{\circ}\text{C})$ e $(-20^{\circ}\text{C} \sim +70^{\circ}\text{C})$ no condensation).	C) ; G: Indust									

Forced air cooling by internal fans. Air flow direction: from Front panel to power supply rear

W: 215, H: 43.5, D: 446(Without busbars and busbars cover),

About 3Kg



## Ⅱ DM 1000W 系列技术指标(300V-2000V)

OUTPUT RATIN	lG		300-3.5	400-2.5	500-2	600-1.7	1000-1	1200-1	1500-0.7	2000-0.5				
Voltage adjustable	range (*1)	V	0~315	0 ~ 420	0 ~ 525	0 ~ 630	0~1050	0~1260	0 ~ 1575	0~2100				
Current adjustable	range (*2)	A	0~3.8	0~2.7	0~2.1	0~1.8	0~1.1	0~1.1	0~0.8	0 ~ 0.55				
Rated power (OP rated value)	PP=105% of	W	1050	1000	1000	1020	1000	1200	1050	1000				
INPUT CHARAC	CTERISTICS		300-3.5	400-2.5	500-2	600-1.7	1000-1	1200-1	1500-0.7	2000-0.5				
Input voltage/frequ	uency		A: Single phase 8	5~265Vac										
Power Factor (Typ			0.99@100Vac 0.98	@200Vac, rated ou	tput power.									
Efficiency at 100 rated output	Vac/200Vac,	%	87/89	87/89	87/89	87/89	88/90	88/90	88/90	88/90				
CONSTANT VOI	LTAGE MOD	E	300-3.5	400-2.5	500-2	600-1.7	1000-1	1200-1	1500-0.7	2000-0.5				
Max. Line regulati	ion (*3)		0.01% of rated out	out voltage										
Max. Load regulat	tion (*4)		0.01% of rated out	out voltage+5mV										
Ripple and noise (	p-p, 20MHz)	mV	150	250	450	500	650	700	1000	1500				
Ripple r.m.s. 5Hz~	~1MHz	mV	30	50	90	100	150	170	200	300				
Temperature coeff	icient		50PPM/°C from ra	ted output voltage, fo	ollowing 30 minutes	warm-up.								
Temperature stabil	lity		0.01% of rated Vou	0.01% of rated Vout over 8hrs interval following 30 minutes warm-up. Constant line, load & temp.										
Warm-up drift			Less than 0.01% of											
Sense compensation	on (*5)	V	5	5	5	5								
Rise response time	e (*6)	mS	100	100	100	100	100	150	150	150				
Fall response	Full load	mS	220	220	200	200	200	220	220	250				
time (*7)	No load	mS	4600	4600	5000	5500	5500	6500	7000	8000				
Transient response	e time	mS	≤2mS (Time for o	mS (Time for output voltage to recover within 0.5% of its rated output for a load change 10~90% of rated output current. )										
Start up delay		≤	6S (Turn on the po	6S (Turn on the power switch, the time when the power starts and enters standby mode)										
CONSTANT CUI	RRENT MOD	ЭE	300-3.5	400-2.5	500-2	600-1.7	1000-1	1200-1	1500-0.7	2000-0.5				
Max. Line regulati	ion (*3)		0.02% of rated out	out current. +2mA										
Max. Line regulati	ion		0.02% of rated outp	out current. +5mA										
Ripple r.m.s. 5Hz~	~1MHz	mA	≤10	≤10	≤10	≤10	≤5	≤5	≤5	≤5				
Temperature coeff	icient		70PPM/°C from r	ated output current, i	following 30 minutes	warm-up.								
Temperature stabil	lity		0.01% of rated Iou	t over 8hrs. interval f	following 30 minutes	warm-up. Constant li	ine, load & temperatu	ıre.						
Warm-up drift			Less than ±0.15%	of rated output currer	nt over 30 minutes fo	llowing power on.								
ANALOG PROG	GRAMMING .	AND M	ONITORING (ISOI	LATED FROM THI	E OUTPUT) (Opt	ional)								
Vout voltage progr	ramming		0~100%, 0~5V or	0~10V, user selectabl	le. Accuracy and line	arity: ±0.15% of rated	l Vout.							
Iout voltage progra	amming		0~100%, 0~5V or	0~10V, user selectabl	le. Accuracy and line	arity: ±0.4% of rated	Iout.							
Vout resistor progr	ramming		0~100%, 0~5/10Kc	ohm full scale, user s	electable. Accuracy a	and linearity: ±0.5% of	of rated Vout.							
Iout resistor progra	amming		0~100%, 0~5/10Ko	ohm full scale, user s	electable. Accuracy a	and linearity: ±0.5% o	of rated Iout.							
Output voltage mo	onitor		0~5V or 0~10V, us	er selectable. Accura	cy: ±0.5% of rated V	out.								
Output current mo	nitor		0~5V or 0~10V, us	er selectable. Accura	cy: ±0.5% of rated Io	out.								
Remote switch on/	/off		High and low level	or dry contact signa	l control power switc	h								
FUNCTIONS AN	D FEATURE	ES												
Series/parallel ope	eration			llel operation of the a lave operation mode.		id model to expand vo	oltage, current and po	ower; Parallel connec	tion is used for auton	natic current				
Constant power co	ontrol		The power within t	The power within the rated power range can be set to achieve constant power mode										
Output resistance	control		Emulates series res	Emulates series resistance. Resistance range: $1\sim1000$ m $\Omega$ .										
Voltage and cur control	rrent slope		Programmable out	Programmable output rise and fall slopes. Programming range: 0.0001~999.9V/mS or A/mS										
LIST dynamic out	put		Four LIST progran	n files can be saved, a	and each file can edit	up to 200 steps of da	ta; There are three ex	ecution modes: coun	t, loop and single ste	).				
Timer function			0-9999 minutes car	n be set										
Quick data storage	e/recall					age, current and other								
Protection function	n		Output overvoltage overvoltage protect		ent protection, overlo	oad protection, over-to-	emperature protection	n, short circuit protec	tion, input undervolta	ge protection,				
			overvoitage protect	HOII										

DIGITAL PROGRAM CONT	ROL	300-3.5	400-2.5	500-2	600-1.7	1000-1	1200-1	1500-0.7	2000-0.5		
Vout programming accuracy		0.05% of rated outp	05% of rated output voltage								
Iout programming accuracy		0.5% of rated outpo	% of rated output curren								
Vout programming resolution		0.002% of rated ou	)2% of rated output voltage								
Iout programming resolution		0.002% of rated ou	.002% of rated output current								
Vout readback accuracy		0.05% of rated out	0.05% of rated output voltage								
Iout readback accuracy		0.5% of rated outpo	ut current								
Vout readback resolution (of rated output voltage)	F.S.	0.004%	0.003%	0.003%	0.002%	0.011%	0.010%	0.007%	0.006%		
Iout readback resolution (of rated output current))	F.S.	0.004%	0.005%	0.006%	0.009%	0.011%	0.011%	0.020%	0.025%		
Communication interface		Built-in USB interf	face, optional CAN &	RS-232&RS-485, I/	O analog, LAN, RS-4	122; Supports Modbu	s-RTU and SCPI indu	ustry standard commu	nication protocols		

FRONT PANEL MONITORIN	NG AND	CONTROL
Operation mode		Programmer knob,digital key and multi-function key
Display		5 digits OLED screen displays output voltage, current, power, working status and other information; Support Chinese and English menu switching display.
Voltage display accuracy		0.05% of rated output voltage±1count.
Current display accuracy		0.5% of rated output current±1count
Voltage setting accuracy		0.05% of rated output voltage
Current setting accuracy		0.5% of rated output current
Setpoint resolution		5 digits OLED; display format: 99999, current value decreases by one digit, decimal point automatically increases by one digit, maximum resolution:1mV; 1mA
Display value resolution		5 digits OLED; display format: 99999, current value decreases by one digit, decimal point automatically increases by one digit, maximum resolution: 1mV; 1mA (0.1mA@Models within 3A)

ENVIRONMENT APPLICAB	ENVIRONMENT APPLICABILITY							
Operating temperature	°C	S: Civil grade (0°C ~ +50°C); G: Industrial grade (-25°C ~ +55°C)						
Storage temperature	°C	vil grade $(-20^{\circ}\text{C} \sim +70^{\circ}\text{C})$ ; G: Industrial grade $(-30^{\circ}\text{C} \sim +85^{\circ}\text{C})$						
Operating humidity	%	20~90% RH (no condensation).						
Storage humidity	%	10~95% RH (no condensation).						
Cooling		Forced air cooling by internal fans. Air flow direction: from Front panel to power supply rear						

MECHANICAL		
Dimensions (WxHxD)	mm	W: 215, H: 43.5, D: 446(Without busbars and busbars cover),
Weight	Kg	About 3Kg

# Ⅱ DM 1700W 系列技术指标(10V-200V)

OUTPUT RATING		10-170	20-85	30-56	40-42	50-34	60-28	80-21	100-17	150-11.2	200-8.5
Voltage adjustable range (*1)	V	0~10.5	0~21	0~32	0~42	0 ~ 53	0 ~ 63	0~84	0~105	0~158	0~210
Current adjustable range (*2)	A	0~180(*8)	0~90	0 ~ 60	0 ~ 44	0~36	0~30	0~22	0~18	0~12	0~9
Rated power (OPP=105% of rated value)	W	1700	1700	1680	1680	1700	1680	1680	1700	1680	1700
INPUT CHARACTERISTIC	s	10-170	20-85	30-56	40-42	50-34	60-28	80-21	100-17	150-11.2	200-8.5
Input voltage/frequency		85Vac~265Vac	/ac~265Vac / 47~63Hz (The output power needs to be derated when the input voltage is lower than 170V)								
Power Factor (Typ)		0.99@100Vac	0.98@200Vac,	rated output pow	er.						
Efficiency at 100Vac/200Vac, rated output	%	86/88	87/89	87/89	87/89	87/89	87/89	87/89	88/90	88/90	88/90
CONSTANT VOLTAGE MO	DE	10-170	20-85	30-56	40-42	50-34	60-28	80-21	100-17	150-11.2	200-8.5
Max. Line regulation (*3)		0.01% of rated	0.01% of rated output voltage								
Max. Line regulation (*4)		0.01% of rated	output voltage+	5mV							
Ripple and noise (p-p, 20MHz)	mV	80	80	80	80	80	100	100	120	120	200
Ripple r.m.s. 5Hz~1MHz	mV	12	12	12	12	12	20	20	20	20	60
Temperature coefficient		50PPM/°C fro	m rated output vo	oltage, following	30 minutes warn	n-up.					
Temperature stability		0.01% of rated	Vout over 8hrs i	nterval following	30 minutes war	m-up. Constant li	ne, load & temp.				
Warm-up drift		Less than 0.01	% of rated output	t voltage+2mV o	ver 30 minutes fo	ollowing power o	n.				
Sense compensation (*5)	V	2	2	5	5	5	5	5	5	5	5
Rise response time (*6)	mS	20	20	20	20	20	20	20	25	50	50
Fall response Full load	mS	30	30	60	60	60	60	60	60	120	120
time (*7) No load	mS	600	1000	1500	2000	2500	2700	3000	3600	3900	4500
Transient response time	mS	≤2mS (Time	for output voltage	e to recover with	in 0.5% of its rate	ed output for a lo	ad change 10~90	% of rated outpu	t current. )		
Start up delay	<u>≤</u>	6S (Turn on t	he power switch,	the time when the	ne power starts ar	nd enters standby	mode)				

CONSTANT CURRENT MODE 10-17			20-85	30-56	40-42	50-34	60-28	80-21	100-17	150-11.2	200-8.5
Max. Line regulation (*3)		0.05% of rated	5% of rated output current								
Max. Line regulation		0.08% of rated	8% of rated output current								
Ripple r.m.s. 5Hz~1MHz	mA	≤350	≤160	≤80	≤60	≤55	≤50	≤30	≤20	≤10	≤10
Temperature coefficient			10V~100V model: 100PPM/°C from rated output current, following 30 minutes warm-up. 150V~200V model: 70PPM/°C from rated output current, following 30 minutes warm-up.								
Temperature stability		0.01% of rated	0.01% of rated Iout over 8hrs. interval following 30 minutes warm-up. Constant line, load & temperature.								
Warm-up drift			$10V\sim100V$ model: Less than $\pm0.25\%$ of rated output current over 30 minutes following power on. $150V\sim200V$ model: Less than $\pm0.15\%$ of rated output current over 30 minutes following power on.								

ANALOG PROGRAMMING	ANALOG PROGRAMMING AND MONITORING (ISOLATED FROM THE OUTPUT) (Optional)								
Vout voltage programming		0~100%, 0~5V or 0~10V, user selectable. Accuracy and linearity: ±0.15% of rated Vout.							
Iout voltage programming		0~100%, 0~5V or 0~10V, user selectable. Accuracy and linearity: ±0.4% of rated Iout.							
Vout resistor programming		0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Vout.							
Iout resistor programming		0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Iout.							
Output voltage monitor		0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Vout.							
Output current monitor		0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Iout.							
Remote switch on/off		High and low level or dry contact signal control power switch							

FUNCTIONS AND FEATURE	FUNCTIONS AND FEATURES								
Series/parallel operation		Support series/parallel operation of the same specification and model to expand voltage, current and power; Parallel connection is used for automatic current sharing in master-slave operation mode.							
Constant power control		The power within the rated power range can be set to achieve constant power mode							
Output resistance control		Emulates series resistance. Resistance range: 1~1000mΩ.							
Voltage and current slope control		Programmable output rise and fall slopes. Programming range: 0.0001~999.9V/mS or A/mS							
LIST dynamic output		Four LIST program files can be saved, and each file can edit up to 200 steps of data; There are three execution modes: count, loop and single step.							
Timer function		0-9999 minutes can be set							
Quick data storage/recall		It can store 4 groups of commonly used working data of voltage, current and other parameters, and can be quickly accessed through the digital buttons on the panel							
Protection function		Output overvoltage protection, overcurrent protection, overload protection, over-temperature protection, short circuit protection, input undervoltage protection, overvoltage protection							

DIGITAL PROGRAM CONT	ROL	10-170	20-85	30-56	40-42	50-34	60-28	80-21	100-17	150-11.2	200-8.5
Vout programming accuracy		0.05% of rated	05% of rated output voltage								
Iout programming accuracy		Models within	10A: 0.2% of ra	ated output curre	nt; Models abov	ve 10A: 0.1% of	rated output cur	rent			
Vout programming resolution		0.002% of rate	02% of rated output voltage								
Iout programming resolution		0.002% of rate	002% of rated output current								
Vout readback accuracy		0.05% of rated	0.05% of rated output voltage								
Iout readback accuracy		Models within	Models within 10A: 0.2% of rated output current; Models above 10A: 0.1% of rated output current								
Vout readback resolution (of rated output voltage)	F.S.	0.011%	0.006%	0.004%	0.003%	0.002%	0.002%	0.002%	0.011%	0.007%	0.005%
Iout readback resolution (of rated output current))	F.S.	0.007%	0.002%	0.003%	0.003%	0.004%	0.004%	0.006%	0.007%	0.010%	0.015%
Communication interface		Built-in USB i	nterface, optional	l CAN&RS-232	&RS-485, I/O an	alog, LAN, RS-4	22; Supports Mo	dbus-RTU and S	SCPI industry star	ndard communica	tion protocols

FRONT PANEL MONITORIN	NG AND	CONTROL
Operation mode		Programmer knob,digital key and multi-function key
Display	-	5 digits OLED screen displays output voltage, current, power, working status and other information; Support Chinese and English menu switching display.
Voltage display accuracy		0.05% of rated output voltage±1count.
Current display accuracy		Models within 10A: 0.2% of rated output current±1count; Models above 10A: 0.1% of rated output current±1count
Voltage setting accuracy	-	0.05% of rated output voltage
Current setting accuracy		Models within 10A: 0.2% of rated output current; Models above 10A: 0.1% of rated output current
Setpoint resolution		5 digits OLED: display format: 99999, current value decreases by one digit, decimal point automatically increases by one digit, maximum resolution: 1mV; 1mA
Display value resolution		5 digits OLED: display format: 99999, current value decreases by one digit, decimal point automatically increases by one digit, maximum resolution: 1mV;1mA

ENVIRONMENT APPLICABILITY			
Operating temperature	°C	Civil grade ( $0^{\circ}\text{C} \sim +50^{\circ}\text{C}$ ); G: Industrial grade ( $-25^{\circ}\text{C} \sim +55^{\circ}\text{C}$ )	
Storage temperature	°C	S: Civil grade (-20°C ~ +70°C); G: Industrial grade (-30°C ~ +85°C)	
Operating humidity	%	20~90% RH (no condensation).	
Storage humidity	%	10~95% RH (no condensation).	
Cooling		Forced air cooling by internal fans. Air flow direction: from Front panel to power supply rear	

MECHANICAL					
Dimensions (WxHxD)	mm	W: 215, H: 43.5, D: 446(Without busbars and busbars cover),			
Weight	Kg	About 3Kg			

# Ⅱ DP 1700W 系列技术指标(300V-2000V)

OUTPUT RATING         300-5.6         400-4.2         500-3.4         600-2.8         1000-1.7         1200-1.4         1500-1.1           Voltage adjustable range (*1)         V         0 ~ 315         0 ~ 420         0 ~ 525         0 ~ 630         0 ~ 1050         0 ~ 1260         0 ~ 1575           Current adjustable range (*2)         A         0 ~ 6         0 ~ 4.5         0 ~ 3.6         0 ~ 3         0 ~ 1.8         0 ~ 1.5         0 ~ 1.2           Rated power (OPP=105% of rated value)         W         1680         1700         1680         1700         1680         1650           INPUT CHARACTERISTICS         300-5.6         400-4.2         500-3.4         600-2.8         1000-1.7         1200-1.4         1500-1.1	2000-0.85 0 ~ 2100 0 ~ 0.9							
Current adjustable range (*2) A 0 ~6 0 ~4.5 0 ~3.6 0 ~3 0 ~1.8 0 ~1.5 0 ~1.2  Rated power (OPP=105% of rated value) W 1680 1680 1700 1680 1700 1680 1650								
Rated power (OPP=105% of rated value) W 1680 1680 1700 1680 1700 1680 1650	0~0.9							
(OPP=105% of rated value) W 1680 1680 1700 1680 1700 1680 1680 1680								
INPUT CHARACTERISTICS 300-5.6 400-4.2 500-3.4 600-2.8 1000-1.7 1200-1.4 1500-1.1	1700							
	2000-0.85							
Input voltage/frequency 85Vac~265Vac / 47~63Hz (The output power needs to be derated when the input voltage is lower than 170V)								
Power Factor (Typ) 0.99@100Vac 0.98@200Vac, rated output power.								
Efficiency at 100Vac/200Vac, rated output	89/91							
CONSTANT VOLTAGE MODE         300-5.6         400-4.2         500-3.4         600-2.8         1000-1.7         1200-1.4         1500-1.1	2000-0.85							
Max. Line regulation (*3) 0.01% of rated output voltage								
Max. Line regulation (*4) 0.01% of rated output voltage+5mV								
Ripple and noise (p-p, mV 150 250 450 500 600 700 850	1000							
Ripple r.m.s. 5Hz~1MHz mV 30 50 90 100 150 170 200	300							
Temperature coefficient 50PPM/°C from rated output voltage, following 30 minutes warm-up.								
Temperature stability 0.01% of rated Vout over 8hrs interval following 30 minutes warm-up. Constant line, load & temp.								
Warm-up drift Less than 0.01% of rated output voltage+2mV over 30 minutes following power on.								
Sense compensation (*5) V 5 5 5								
Rise response time (*6) mS 100 100 100 100 150 150	150							
Fall response   Full load   mS   220   220   200   200   200   220   220	250							
time (*7) No load mS 4600 4600 5000 5500 5500 6500 7000	8000							
Transient response time mS ≤2mS (Time for output voltage to recover within 0.5% of its rated output for a load change 10~90% of rated output current.)								
2   6S (Turn on the power switch, the time when the power starts and enters standby mode)								
<b>CONSTANT CURRENT MODE</b> 300-5.6 400-4.2 500-3.4 600-2.8 1000-1.7 1200-1.4 1500-1.1	2000-0.85							
Max. Line regulation (*3) 0.02% of rated output current. +2mA								
Max. Line regulation 0.02% of rated output current. +5mA								
Ripple r.m.s. 5Hz~1MHz mA ≤10 ≤10 ≤10 ≤5 ≤5 ≤5	≤5							
Temperature coefficient 70PPM/°C from rated output current, following 30 minutes warm-up.								
Temperature stability 0.01% of rated Iout over 8hrs. interval following 30 minutes warm-up. Constant line, load & temperature.								
Warm-up drift Less than ±0.15% of rated output current over 30 minutes following power on.								
ANALOG PROGRAMMING AND MONITORING (ISOLATED FROM THE OUTPUT) (Optional)								
Vout voltage programming 0~100%, 0~5V or 0~10V, user selectable. Accuracy and linearity: ±0.15% of rated Vout.								
Iout voltage programming 0~100%, 0~5V or 0~10V, user selectable. Accuracy and linearity: ±0.4% of rated Iout.								
Vout resistor programming 0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Vout.								
Iout resistor programming 0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: ±0.5% of rated Iout.								
Output voltage monitor 0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Vout.								
Output current monitor 0~5V or 0~10V, user selectable. Accuracy: ±0.5% of rated Iout.								
Remote switch on/off High and low level or dry contact signal control power switch								
FUNCTIONS AND FEATURES								
Series/parallel operation  Support series/parallel operation of the same specification and model to expand voltage, current and power; Parallel connection is used for automatic sharing in master-slave operation mode.	current							
Constant power control The power within the rated power range can be set to achieve constant power mode								
	· ·							
Constant power control The power within the rated power range can be set to achieve constant power mode  Output resistance control Emulates series resistance. Resistance range: 1~1000mΩ.  Voltage and current slope Programmable output rise and fall slopes. Programming range: 0.0001~999.9V/mS or Δ/mS.								
Constant power control       The power within the rated power range can be set to achieve constant power mode         Output resistance control       Emulates series resistance. Resistance range: 1~1000mΩ.         Voltage and current slope control       Programmable output rise and fall slopes. Programming range: 0.0001~999.9V/mS or A/mS								
Constant power control        The power within the rated power range can be set to achieve constant power mode         Output resistance control        Emulates series resistance. Resistance range: 1~1000mΩ.         Voltage and current slope control        Programmable output rise and fall slopes. Programming range: 0.0001~999.9V/mS or A/mS         LIST dynamic output        Four LIST program files can be saved, and each file can edit up to 200 steps of data; There are three execution modes: count, loop and single step.								
Constant power control        The power within the rated power range can be set to achieve constant power mode         Output resistance control        Emulates series resistance. Resistance range: 1~1000mΩ.         Voltage and current slope control        Programmable output rise and fall slopes. Programming range: 0.0001~999.9V/mS or A/mS         LIST dynamic output        Four LIST program files can be saved, and each file can edit up to 200 steps of data; There are three execution modes: count, loop and single step.         Timer function        0-9999 minutes can be set	ns on the panel							
Constant power control        The power within the rated power range can be set to achieve constant power mode         Output resistance control        Emulates series resistance. Resistance range: 1~1000mΩ.         Voltage and current slope control        Programmable output rise and fall slopes. Programming range: 0.0001~999.9V/mS or A/mS         LIST dynamic output        Four LIST program files can be saved, and each file can edit up to 200 steps of data; There are three execution modes: count, loop and single step.								

DIGITAL PROGRAM CONTROL		300-5.6	400-4.2	500-3.4	600-2.8	1000-1.7	1200-1.4	1500-1.1	2000-0.85
Vout programming accuracy		0.05% of rated output voltage							
Iout programming accuracy		0.2% of rated output current; (Models within 3A: 0.5% of rated output current)							
Vout programming resolution		0.002% of rated output voltage							
Iout programming resolution		0.002% of rated output current							
Vout readback accuracy		0.05% of rated output voltage							
Iout readback accuracy		0.2% of rated output current; (Models within 3A: 0.5% of rated output current)							
Vout readback resolution (of rated output voltage)	F.S.	0.004%	0.003%	0.003%	0.002%	0.011%	0.010%	0.007%	0.006%
Iout readback resolution (of rated output current))	F.S.	0.003%	0.003%	0.004%	0.005%	0.007%	0.010%	0.010%	0.015%
Communication interface		Built-in USB inte		AN & RS-232&RS-4	485, I/O analog, L	AN, RS-422; Supp	orts Modbus-RTU	and SCPI industry	/ standard

FRONT PANEL MONITORING AND CONTROL				
Operation mode		rogrammer knob,digital key and multi-function key		
Display		digits OLED screen displays output voltage, current, power, working status and other information; Support Chinese and English menu switching display.		
Voltage display accuracy		0.05% of rated output voltage±1 count.		
Current display accuracy		0.2% of rated output current±1count. (Models within 3A: 0.5% of rated output current±1count)		
Voltage setting accuracy		0.05% of rated output voltage		
Current setting accuracy		0.2% of rated output current; (Models within 3A: 0.5% of rated output current)		
Setpoint resolution		5 digits OLED; display format: 99999, current value decreases by one digit, decimal point automatically increases by one digit, maximum resolution:1mV; 1mA		
Display value resolution		5 digits OLED; display format: 99999, current value decreases by one digit, decimal point automatically increases by one digit, maximum resolution: 1mV; 1mA (0.1mA@Models within 3A)		

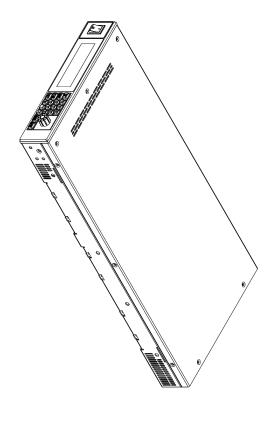
ENVIRONMENT APPLICABILITY		
Operating temperature	°C	S: Civil grade (0°C ~ +50°C); G: Industrial grade (-25°C ~ +55°C)
Storage temperature	°C	S: Civil grade (-20°C ~ +70°C) ; G: Industrial grade (-30°C ~ +85°C)
Operating humidity	%	20~90% RH (no condensation).
Storage humidity	%	10~95% RH (no condensation).
Cooling		Forced air cooling by internal fans. Air flow direction: from Front panel to power supply rear

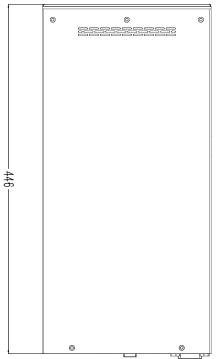
MECHANICAL					
Dimensions (WxHxD)	mm	W: 215, H: 43.5, D: 446(Without busbars and busbars cover),			
Weight	Kg	About 3Kg			

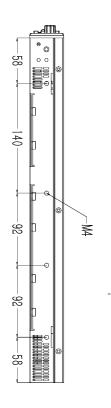
### **NOTES:**

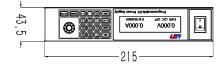
- \*1: Minimum voltage is guaranteed to maximum 0.1% of rated output voltage.
- \*2: Minimum current is guaranteed to maximum 0.2% of rated output current.
- \*3: Constant load.
- \*4: From No-Load to Full-Load, constant input voltage. Measured at the sensing point in Remote Sense.
- \*5: The maximum voltage on the power supply terminals must not exceed the maximum voltage.
- \*6: From 10% to 90% or 90% to 10% of Rated Output Voltage, with rated, resistive load.
- \*7: From 90% to 10% of Rated Output Voltage.
- \*8: Derate 5A/1°C when ambient temperature above 40°C

# **I** Dimensional drawing

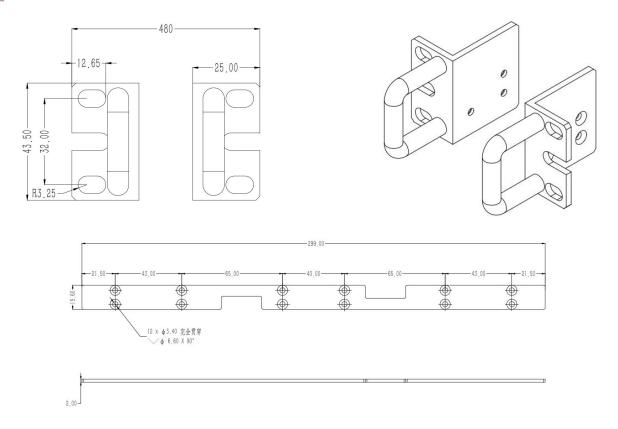




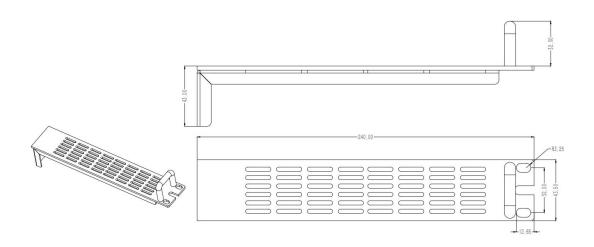




### I Installation dimension drawing

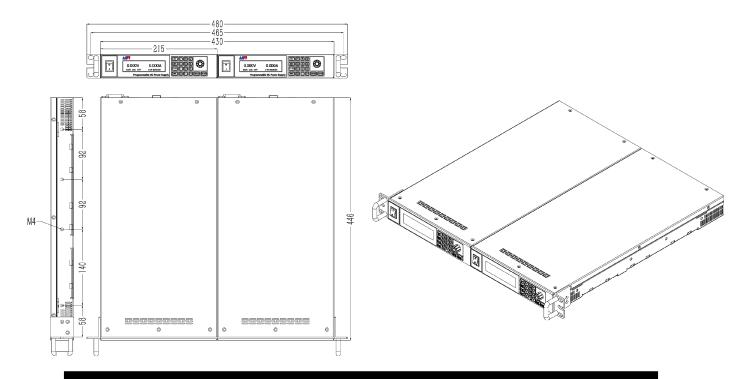


Two DM models installed in 19" standard cabinet installation accessories (optional)

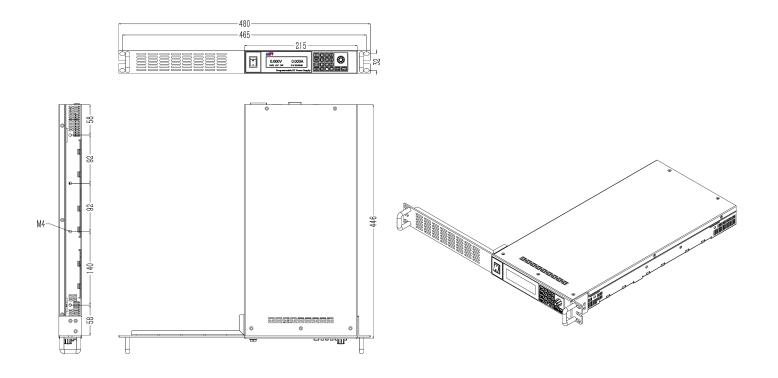


One DM models installed in 19" standard cabinet installation accessories (optional)

### I Installation dimension drawing



Installation dimension drawing of two DM models installed in 19" standard cabine



Installation dimension drawing of one DM models installed in 19 " standard cabine





# asstpanae



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