

# Programmable DC Electronic Load **ESM-300**

## FEATURE

- \* 4-DIGIT AUTO RANGE DISPLAY
- \* CC,CR,CV,CP OPERATION MODE
- \* OVP,OCP,OPP,OTP,RPP PROTECION
- \* HIGH ACCURACY
- \* PORTABLE TYPE SINGLE LOAD or RACK TYPE
- \* DYNAMIC,STATIC, EXTERNAL FUNTION MODE
- \* 24BIT A/D CONVERTER
- \* RS-232C(RS-485) For Interface
- \* POWER MOSFET
- \* ACTIVE POWER DISSIPATION BALANCE

## Application

- \* VOLTAGE AND CURRENT SOURCE TESTING
- \* POWER SUPPLY TRANSIENT RESPONSE
- \* BATTERY DISCHARGE
- \* R&D, QUALITY CONTROLM ATE SYSTEM
- \* POWER SUPPLY LOAD REGULATION
- \* CURRENT LIMIT TEST AND BATTERY
- \* EMULATION BY USING CV MODE



## SERIES MODEL

No.	WATT	VOLTAGE	CURRENT	CH	MODEL
1	200W	80V	40A	1	SL - 200
2		80V	40A	4	SL - 2000
3		250V	20A	1	SM - 200
4		500V	10A	1	SH - 200
5		80V	60A	1	SL - 300
6	300W	80V	60A	4	SL - 3000
7		250V	30A	1	SM - 300
8		500V	15A	1	SH - 300
9	600W	80V	120A	1	SL - 600
10		250V	60A	1	SM - 600
11		500V	30A	1	SH - 600
12	1200W	80V	240A	1	SL - 1200
13		250V	120A	1	SM - 1200
14		500V	60A	1	SH - 1200
15	2400W	80V	240A	1	SLL - 2400
16		80V	480A	1	SLH - 2400
17		250V	120A	1	SML - 2400
18		250V	240A	1	SMH - 2400
19		500V	60A	1	SHL - 2400
20	5KW	500V	120A	1	SHH - 2400
21		80V	500A	1	SLL - 5K
22		80V	1000A	1	SLH - 5K
23		250V	250A	1	SML - 5K
24		250V	500A	1	SMH - 5K
25	10KW	500V	120A	1	SHL - 5K
26		500V	250A	1	SHH - 5K
27		80V	500A	1	SLL - 10K
28		80V	1000A	1	SLM - 10K
29		80V	2000A	1	SLH - 10K
30	10KW	250V	500A	1	SML - 10K
31		250V	1000A	1	SMH - 10K
32		500V	250A	1	SHL - 10K
33		500V	500A	1	SHH - 10K

# SPEC

SPECIFICATION			ESM-300W
OPERATING RANGE	POWER		300W
	VOLTAGE		2.5~250V
	CURRENT		0~30A
	MIN. OPERATING VOLTAGE		1.0V at 40A
MODE	CC	RANGE	0~10A/10~30A
		RESOLUTION	1mA/10mA
		ACCURACY	0.06%+0.2%F.S
	CV	RANGE	2.5~250V
		RESOLUTION	10mV
		ACCURACY	0.08%+0.1%F.S
	CP	RANGE	0~10W/10~100W/100~300W
		RESOLUTION	10mW/100mW
		ACCURACY	0.5%+0.5%F.S
	CR	RANGE	0.334~10Ω/10~100Ω/ 100~1000Ω/1000~8000Ω
		RESOLUTION	1mΩ/10mΩ/100m Ω/1Ω
		ACCURACY	0.06%+0.2%F.S
FUNCTION	LOAD ON DELAY TIME		1ms~5000ms
	DYNAMIC	MEMORY	3CH(T1,T2,T3)
		TIME	100μs~1s/1~5s
		RESOLUTION	100μs/1ms
		SLEW RATE	0.001~2A/μs
		RESOLUTION	0.001A/μs
		CURRENT	0~10A/10~40A
		RESOLUTION	1mA/10mA
VOLTAGE READ BACK	RANGE	0~10V/10~80V	
	RESOLUTION	1mV/10mV	
	ACCURACY	0.05%+0.1%F.S	
CURRENT READ BACK	RANGE	0~10A/10~30A	
	RESOLUTION	1mA/10mA	
	ACCURACY	0.1%+0.1%F.S	
PROTECTION	OPP(POWER)	312W	
	OVP(VOLTAGE)	255V	
	OCP(CURRENT)	30.6A	
	OTP(TEMPERATURE)	85°C	
INPUT RESISTANCE(LOAD OFF)			80kΩ
V SENSE			0~80V
I MONITOR			0~30A/0~10V
EXTERNAL MODE			0~30A/0~10V
PC INTERFACE			RS-232/RS-485(Built-in)
WEIGHT (APPROX)			12?kg
DIMENSION(WxHxD)mm			140 x 200 x 400