800 W Programmable DC Power Supply

Technical Specifications

	DCAe20M80	DCAe60M26	DCAe160M10	DCAe600M2.67	DCAe1000M1.6
Output Voltage	20 V	60 V	160 V	600 V	1000 V
	Multi Ranging (Parabolic)				
Output Current	80 A	26.5 A	10 A	2.67 A	1.6 A
Rated Power	800 Watts				
Efficiency at 230 V, full load	82 %	87 %	87 %	88 %	86 %
Constant Voltage Mode					
Load regulation 0 ~ 100% (mV)	0.01% of Vrated				
Line Regulation (mV)	0.01% of Vrated				
Ripple (mVrms) BW=300 kHz	5mVrms	5mVrms	8mVrms	20mVrms	90mVrms
Ripple (mVrms) BW=5Hz~1MHz	5mVrms	6mVrms	15mVrms	50mVrms	100mVrms
Ripple (mVpp) 20 MHz	30mVpp	50mVpp	70mVpp	80mVpp	200mVpp
Constant Current Mode					
Load regulation 0 ~ 100 % (mA)	25mA	7mA	3mA	10mA	10mA
Line Regulation (mA)	2mA	3.5mA	2mA	5mA	2mA
Ripple (mArms) BW=300 kHz	20mArms	8mArms	3mArms	3mArms	3mArms
Ripple (mArms) BW=5 Hz ~ 1MHz	25mArms	10mArms	5mArms	5mArms	5mArms
Ripple (mApp) 20 MHz	100mApp	25mApp	15mApp	20mApp	20mApp
Remote sense drop	1 V typically	2 V typically		2 V typically	

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Programming Speed					
Rise time (10% to 90%) into resistive load					
Time 100% load	10V : 6.5ms 20V : 12ms	30V : 6ms 60V : 25ms	80V : 30ms 160V : 80ms	300V : 70ms 600V : 225ms	500V : 45ms 1000V:180ms
Time 10% load	10V : 2.5ms 20V : 5ms	30V : 2.5ms 60V : 10ms	80V : 20ms 160V : 50ms	300V : 20ms 600V : 100ms	500V : 40ms 1000V:160ms
Fall time (90% to 10%) into resistive load					
Time 100% load	10V : 6.5ms 20V : 12ms	30V : 8ms 60V : 25ms	80V : 30ms 160V : 100ms	300V : 60ms 600V : 220ms	500V :50ms 1000V:190ms
Time 10% load	10V : 30ms 20V : 120ms	30V : 60ms 60V: 250ms	80V : 250ms 160V : 900ms	300V : 600ms 600V : 2.5s	500V : 500ms 1000V : 1.8s
Time No load	10V : 0.8s 20V : 1.2s	30V : 1s 60V : 2.5s	80V : 3s 160V : 6s	300V : 6s 600V : 12s	500V : 10s 1000V :15s
Recovery Time					
Recovery within	80mV	80mV	100mV	0.5V	1V
time @ 50 – 100 % load step	100µs	100µs	100µs	100µs	100µs
max deviation @ 230 V mains	10V : 300mV 20V:160mV	30V : 300mV 60V : 150mV	80V : 1V 160V : 500mV	300V : 1V 600V : 1.5V	500V : 1.5V 1000V : 3V
Temperature Coefficients	CV : 80 ppm/°C CC : 80 ppm/°C after 30 min of warm up time and during 8 hrs (Measured at full load)				
Output Stability	CV : 80 ppm CC : 100 ppm after 30 min of warm up time and during 8 hrs (Measured at full load)				
Analog Programming (Rear panel 25 pin D **connector**)					
Programming	Voltage : 0 ~ 5 V Accuracy : ± 0.5 % of Vout rated Input impedance : 1 MΩ Current : 0 ~ 5 V Accuracy : ± 1% of Iout rated Input impedance : 1 MΩ				
Monitoring	Voltage : 0 ~ 5 V, Accuracy : ±1 % of Vout rated Output impedance : <150 Ω / 4 mA max Current : 0 ~ 5 V, Accuracy : ±1 % of Iout rated Output impedance : 150 Ω / 4 mA max				
V reference	5.1 V ± 15 mV				
Status outputs	Power Supply : OK = Logic 1 (High), AC Fail = Logic 0 (Low), DC Fail : Logic 0 (low) for DC fail by ± 5% of set value, CV / CC Status : CV = Logic 0 / CC = Logic 1 Interlock : Short = Power Supply Enabled, Open = Power Supply Disabled DC ON Status : ON = Logic 1, OFF= Logic 0, OVP Status : Fault = Logic 0, OK = Logic 1, OTP Status : Fault = Logic 0, OK = Logic 1, Remote Status : Remote = Logic 1, Local = Logic 0				

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Remote shutdown		+5 V				
Front Panel						
Controls		Mains ON/OFF, Voltage and Current setting with Encoder(Coarse, Fine & Super Fine) Switch settings : Voltage & Current Set, Over-voltage & Output ON/OFF				
Indicators		LEDs for : Set, CV, CC, Output Status; Messages on Display: Voltage & Current Set Value, Voltage & Current Read Value, Over Voltage, AC-Fail, Over Temperature				
Display						
Accuracy		Voltage : ± (0.25% + 2D), Current : ± (0.5% + 2D)				
Scale	Voltage(V)	0- 20.00	0-60.00	0-160.0	0-600.0	0-100.0
	Current(A)	0-80.00	0-26.00	0-10.00	0-2.67	0-1.60
Resolution	Voltage	0.01	0.01	0.1	0.1	0.1
	Current	0.01	0.01	0.01	0.01	0.01
Protections		Over Voltage, Over Current, Short Circuit, Over Temperature				
Output Terminals		Bus bar with M5 bolts				
Parallel operation		4 number of units in parallel to increase current				
Serial operation		max 600 V to chassis			No series operation	
Mains Input		Universal AC input, Single phase, 90 ~ 270V, 50 / 60 Hz (47 ~ 63Hz) Input connector : IEC320/C14 , EN 60320/14 Standby Power : 30 Watts @ 230V (Vout max, No load) Internal Fuse L : 20 A Fast , 6.3 x 32 mm ceramic fuse.				
Power Factor		0.99 @ full load / 0.98 @ 50% load				
Turn On delay		600 ms after mains switched ON				
Inrush current		<25A				
Hold up Time		20ms				
Environment Conditions						
Operating Temperature		0 ~ +50°C with 100% load; derated to 75% at 60°C				
Storage		-40 ~ + 85°C				
Humidity		max. 95% non condensing at 40°C max. 75% non condensing at 50°C				
Insulation		Insulation : Input to Output : 3750 V for 1 min Input to case : 2500 Vrms, Output to case : 600 V Insulation resistance : 100 MΩ at 25°C, 70% RH, 500 Vdc				
Dimension		W x D x H : 443 x 445 x 43.5 mm (1U, 19” Rack size) excluding connectors, terminals, switches, front and back panel controls, handles etc.				

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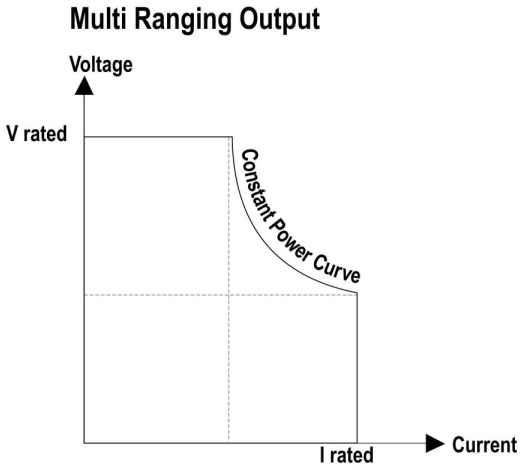
Weight	8.9 kg				
Cooling	Forced, variable Fan speed				
Accessories Supplied	Mains cable				

Subject to change without notice

Note : For 0 ~ 10V analog programming, please contact us.



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