

800 W Programmable DC Power Supply

MADE IN
INDIA



Technical Specifications

	DCX20M80	DCX60M26	DCX160M10	DCX600M2.67
Output Voltage	20V	60V	160V	600V
	Multi Ranging			
Output Current	80 A	26.5 A	10 A	2.67 A
Rated Power	800 Watts			
Efficiency at 230 V, full load	85%	87%	90%	90%
Constant Voltage Mode				
Load regulation 0 ~ 100% (mV)	1	2	2	10
Line Regulation (mV)	1	1	1	2
Ripple (mVrms) BW=300 kHz	5	5	5	10
Ripple (mVrms) 5Hz~1MHz	15	5	8	60
Ripple (mVpp) 20 MHz	20	20	30	80
Constant Current Mode				
Load regulation 0 ~ 100 % (mA)	10	7	3.8	2
Line Regulation (mA)	2	3.5	2	2
Ripple (mArms) BW=300 kHz	20	5	2	1
Ripple (mArms) BW=5 Hz ~ 1MHz	25	10	5	5
Ripple (mApp) 20 MHz	100	25	15	3
Remote sense drop	2 V typically			5 V typically

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Programming Speed				
Rise time (10% to 90%) into resistive load				
Time 100% load	10 V : 6.5 ms 20 V : 12 ms	30 V : 6 ms 60 V : 20 ms	80 V : 5 ms 160 V : 10 ms	300 V : 5 ms 600 V : 10 ms
Time 10% load	10 V : 2.5 ms 20 V : 5 ms	30 V : 2.5 ms 60 V : 10 ms	80 V : 2.5 ms 160 V : 5 ms	300 V : 3 ms 600 V : 6 ms
Fall time (90% to 10%) into resistive load				
Time 100% load	10 V : 6.5 ms 20 V : 12 ms	30 V : 6 ms 60 V : 25 ms	80 V : 5 ms 160 V : 10 ms	300 V : 4 ms 600 V : 15 ms
Time 10% load	10 V : 60 ms 20 V : 120 ms	30 V : 60 ms 60 V : 250 ms	80 V : 40 ms 160 V : 80 ms	300 V : 45 ms 600 V : 160 ms
Time No load	10 V : 0.5 s 20 V : 1 s	30 V : 1 s 60 V : 2.5 s	80 V : 2 s 160 V : 4 s	300 V : 2 s 600 V : 4 s
Recovery Time				
Recovery within time @ 50 – 100 % load step	80 mV 100 us	80 mV 100 us	100 mV 100 us	1 V 100 us
max deviation @ 230 V mains	10 V : 300 mV 20 V : 160 mV	30 V : 300 mV 60 V : 150 mV	80 V : 1 V 160 V : 500 mV	300 V : 2 V 600 V : 1.5 V
Output Impedance CV, 0-1kHz CV, 1-100kHz	< 1 mΩ < 30 mΩ	< 10 mΩ < 30 mΩ	<0.1Ω < 30 mΩ	< 0.18 Ω < 30 mΩ
Temperature Coefficients	CV : 50 ppm/°C CC : 60 ppm/°C after 30 min of warm up time			
Output Stability	CV : 80 ppm , CC : 100 ppm, after warm up of 30 min and during 8 hrs			
Analog Programing (Rear panel 25 pin D connector)				
Programing	V out : 0 ~ 5 V / 0 ~ 10 V, user selectable, Accuracy : 0.2 %, Input impedance : 1 MΩ I out : 0 ~ 5 V / 0 ~ 10 V, user selectable, Accuracy : 0.5 % Input impedance : 1 MΩ			
Monitoring	V out : 0 ~ 5 V / 0 ~ 10 V, user selectable, Accuracy : 0.2 % output impedance : 2 Ω / 0.4 mA max I out : 0 ~ 5 V / 0 ~ 10 V, user selectable, Accuracy : 0.5 % Input impedance : 2 Ω / 0.4 mA max			
V reference	5 V ± 10 mV +12 V output : 12 V + 0.2 V 0.2 A max.			

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Resistor Programing	Voltage : 0~100%, 0~5/10 kΩ full scale, user selectable, Accuracy and linearity : ±1% . Current : 0~100%, 0~5/10 kΩ full scale, user selectable, Accuracy and linearity: ± 1.5 %			
Status outputs	Power Supply OK, AC Fail, DC Fail CV / CC Indications Remote / Interlock : Dry contact			
Remote shutdown	with +5 V or relay contacts			
Remote Programing				
RS232 / LAN / USB / RS485				
Voltage Programing	16 bit , Resolution : 0.012%, Accuracy : 0.05% Vout + 0.05% Vrated			
Current Programing	16 bit , Resolution : 0.012% , Accuracy : 0.1% Iout + 0.1% I rated			
Monitor Voltage	16 bit , Resolution : 0.012% , Accuracy : 0.1% Vout + 0.1% V rated			
Monitor Current	16 bit , Resolution : 0.012% , Accuracy : 0.25% Iout + 0.02 I rated			
OVL & UVL Programing	Resolution : 0.012% , Accuracy : 1%			
Front Panel controls: Indicators :	Mains ON/ OFF, Voltage and Current setting encoders, Front panel lock, OVP / UVL, Menu selection, Voltage, Current, Alarm, Foldback, CV, CC, Local, Output ON			
Display				
Resolution	4 digit (Simultaneous display for voltage and current)			
Accuracy	0.5 % ± 2 d			
	Display scale			
Voltage	0 ~ 20.00 V	0 ~ 60.00 V	0 ~ 160.0 V	0 ~ 600.0 V
Current	0 ~ 80.00 A	0 ~ 26.50 A	0 ~ 10.00 A	0 ~ 2.670 A
Protections	Over voltage , Over current, Short Circuit, Over temperature			
Output Terminals	Bus bar with M5 bolts		Connector	
Parallel operation	Up to 4 units in Master/Slave mode for parallel operation with equal current sharing.			
Serial operation	2 units in series, max 600 V to chassis.			
Mains Input	Universal AC input, Single phase, 90 ~ 270V, 50 / 60 Hz (47 ~ 63Hz) Input connector : IEC320/C14 , EN 60320/14 Standby Power : 20 Watts @ 230V (Vout max, No load) Internal Fuse L : 15 A, 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	20 ms			

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Environment Conditions				
Operating Temperature	-20 ~ +50°C; with 100% load; derate 75% at 60°C			
Storage	-40 ~ + 85°C			
Humidity	max. 95% non condensing at 40°C max. 75% non condensing at 50°C			
Safety	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 (8.5kg) (1U, 19" Rack size) excluding connectors, terminals, switches, front and back panel controls, handles etc			
Weight	8.5 kg			
Cooling	Forced , variable fan speed			
Accessories Supplied	Mains Cable, Serial Interface Cable, USB Cable			

Subject to change without notice

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