

## DP/DPR MODELS: 5-250 AMPERES

### Product Features



- ▶ System Output: DC, High Frequency Pulse (HFP) or Pulse Reverse.
- ▶ Current outputs from 5-250 amperes average.
- ▶ Voltage output from 10-40 volts.
- ▶ Multiple options for control interfaces.
- ▶ Custom sizes and configurations available.
- ▶ Small package size: switch mode technology.
- ▶ Rugged, environmentally-sealed, powder-coated enclosure.

### Product Overview

The MicroStar DP/DPR Series power supply is based on linear technology. The control interface features a fully-programmable microprocessor. Menus are accessible to set ampere time and real-time cycles, output tolerance requirements and more.

- ▶ Real Time Cycle (RTC) Control
- ▶ Ampere Time Cycle Control (ATC)
- ▶ Ampere Time Totalizer
- ▶ Constant current, constant voltage, and cross-over regulation modes
- ▶ High Frequency Pulse (HFP) Output Capability:
  - DC to 5000 Hz pulses
- ▶ FrontPanel+ Host Control Program for process set-up, process storage and data logging
- ▶ RS485 serial port and USB port for host control
- ▶ Electronic overload, over-temperature, and short circuit protection
- ▶ Save/recall up to 10 different process steps
- ▶ Forced air cooled (Larger models are water cooled)

### Performance Specifications

- ▶ Line Regulation: +/- 1% of setting or +/- 0.1% of maximum rating, whichever is greater
- ▶ Load Regulation: +/- 1% of setting or +/- 0.1% of maximum rating, whichever is greater
- ▶ Digital Meter Accuracy: +/- 1% plus L.S.D.
- ▶ Temperature Stability: 0.2% of peak rating after 15 minute warm up
- ▶ Ripple: <1% RMS of maximum rated output voltage

### Options

- ▶ Recipe creation and storage
- ▶ Remote control interface panel
- ▶ Analog interface board: 4-20mA, 0-5V, or 0-10V
- ▶ Auxiliary totalizer with relay output to turn on/off pump, mixer, etc.
- ▶ Master/slave control - synchronize multiple units
- ▶ Ramp timer
- ▶ Trickle current
- ▶ 19" rack mount flanges

## DP MODELS: 5-250 AMPERES (FORWARD ONLY)

Model	Voltage (DC)	Max Avg/Peak Current	Voltmeter Resolution	Amp Meter Resolution	AC Inputs Available	Size
<b>20 Volts</b>						
<b>DP20-5-10 XR</b>	0-20	5 / 10 A	*0.1/0.01 V	0.000 - 0.999 AMPS (AVERAGE) IN 0.001 AMP INCREMENTS 1.00 - 5.00 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS	A, B	A
<b>DP20-15-30 XR</b>	0-20	15 / 30 A	*0.1/0.01 V	0.000 - 2.999 AMPS (AVERAGE) IN 0.001 AMP INCREMENTS 3.00 - 15.00 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS	A, B	A
<b>DP20-30-100 XR</b>	0-20	30 / 100 A	*0.1/0.01 V	0.000 - 9.999 AMPS (AVERAGE) IN 0.001 AMP INCREMENTS 10.00 - 30.00 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS	A, B	B
<b>DP20-50-200 XR</b>	0-20	50 / 200 A	*0.1/0.01 V	0.00 - 19.99 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS 20.0 - 50.0 AMPS (AVERAGE) IN 0.1 AMP INCREMENTS	B	C
<b>DP20-100-400 XR</b> Water Cooled	0-20	100 / 400 A	*0.1/0.01 V	0.00 - 39.99 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS 40.0 - 100.0 AMPS (AVERAGE) IN 0.1 AMP INCREMENTS	C	C
<b>DP20-150-300 XR</b> Water Cooled	0-20	150 / 300 A	*0.1/0.01 V	0.00 - 29.99 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS 30.0 - 150.0 AMPS (AVERAGE) IN 0.1 AMP INCREMENTS	C	C
<b>DP20-250-400 XR</b> Water Cooled	0-20	250 / 400 A	*0.1/0.01 V	0.00 - 39.99 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS 40.0 - 250.0 AMPS (AVERAGE) IN 0.1 AMP INCREMENTS	C, D	C
<b>40 Volts</b>						
<b>DP40-5-10 XR</b>	0-40	5 / 10 A	*0.1/0.01 V	0.000 - 0.999 AMPS (AVERAGE) IN 0.001 AMP INCREMENTS 1.00 - 5.00 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS	B	A
<b>DP40-15-30 XR</b>	0-40	15 / 30 A	*0.1/0.01 V	0.000 - 2.999 AMPS (AVERAGE) IN 0.001 AMP INCREMENTS 3.00 - 15.00 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS	A, B	A
<b>DP40-30-100 XR</b>	0-40	30 / 100 A	*0.1/0.01 V	0.000 - 9.999 AMPS (AVERAGE) IN 0.001 AMP INCREMENTS 10.00 - 30.00 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS	B, C	B
<b>DP40-50-200 XR</b> Water Cooled	0-40	50 / 200 A	*0.1/0.01 V	0.00 - 19.99 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS 20.0 - 50.0 AMPS (AVERAGE) IN 0.1 AMP INCREMENTS	C	C
<b>DP40-100-400 XR</b> Water Cooled	0-40	100 / 400 A	*0.1/0.01 V	0.00 - 39.99 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS 40.0 - 100.0 AMPS (AVERAGE) IN 0.1 AMP INCREMENTS	C, D	C

\*Meter readings below 10 volts will show 0.01 Volt Resolution

Minimum Suggested Setting: 1% of peak current rating

**AC Input Options:**

- A:** 110-120 VAC, 50-60 Hz, 1 Phase
- B:** 208-240 VAC, 50-60 Hz, 1 Phase
- C:** 208-240 VAC, 50-60 Hz, 3 Phase
- D:** 480 VAC, 50-60 Hz, 3 Phase

**Physical Sizes:**

- A:** 8.75" High x 17" Wide x 23" Deep
- B:** 8.75" High x 17" Wide x 26" Deep
- C:** 10.5" High x 22" Wide x 26" Deep

Specifications subject to change without notification

## DPR MODELS: 5-250 AMPERES (FORWARD OR REVERSE)

Model	Voltage (DC)	Max Avg/Peak Current	Voltmeter Resolution	Amp Meter Resolution	AC Inputs Available	Size
<b>20 Volts</b>						
DPR20-5-10 XR	0-20	5 / 10 A	*0.1/0.01 V	0.000 - 0.999 AMPS (AVERAGE) IN 0.001 AMP INCREMENTS 1.00 - 5.00 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS	A, B	A
DPR20-15-30 XR	0-20	15 / 30 A	*0.1/0.01 V	0.000 - 2.999 AMPS (AVERAGE) IN 0.001 AMP INCREMENTS 3.00 - 15.00 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS	A, B	A
DPR20-30-100 XR	0-20	30 / 100 A	*0.1/0.01 V	0.000 - 9.999 AMPS (AVERAGE) IN 0.001 AMP INCREMENTS 10.00 - 30.00 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS	A, B	B
DPR20-50-200 XR	0-20	50 / 200 A	*0.1/0.01 V	0.00 - 19.99 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS 20.0 - 50.0 AMPS (AVERAGE) IN 0.1 AMP INCREMENTS	B	C
DPR20-100-400 XR Water Cooled	0-20	100 / 400 A	*0.1/0.01 V	0.00 - 39.99 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS 40.0 - 100.0 AMPS (AVERAGE) IN 0.1 AMP INCREMENTS	C, D	C
DPR20-150-300 XR Water Cooled	0-20	150 / 300 A	*0.1/0.01 V	0.00 - 29.99 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS 30.0 - 150.0 AMPS (AVERAGE) IN 0.1 AMP INCREMENTS	C, D	C
DPR20-250-400 XR Water Cooled	0-20	250 / 400 A	*0.1/0.01 V	0.00 - 39.99 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS 40.0 - 250.0 AMPS (AVERAGE) IN 0.1 AMP INCREMENTS	C, D	C
<b>40 Volts</b>						
DPR40-5-10 XR	0-40	5 / 10 A	*0.1/0.01 V	0.000 - 0.999 AMPS (AVERAGE) IN 0.001 AMP INCREMENTS 1.00 - 5.00 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS	B	A
DPR40-15-30 XR	0-40	15 / 30 A	*0.1/0.01 V	0.000 - 2.999 AMPS (AVERAGE) IN 0.001 AMP INCREMENTS 3.00 - 15.00 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS	A, B	A
DPR40-30-100 XR	0-40	30 / 100 A	*0.1/0.01 V	0.000 - 9.999 AMPS (AVERAGE) IN 0.001 AMP INCREMENTS 10.00 - 30.00 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS	B, C	B
DPR40-50-200 XR Water Cooled	0-40	50 / 200 A	*0.1/0.01 V	0.00 - 19.99 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS 20.0 - 50.0 AMPS (AVERAGE) IN 0.1 AMP INCREMENTS	C	C
DPR40-100-400 XR Water Cooled	0-40	100 / 400 A	*0.1/0.01 V	0.00 - 39.99 AMPS (AVERAGE) IN 0.01 AMP INCREMENTS 40.0 - 100.0 AMPS (AVERAGE) IN 0.1 AMP INCREMENTS	C, D	C

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