

# TDK-Lambda DIN Rail Power Products





## AC-DC DIN Rail Products



DIN Rail

### Applications

- ◆ Factory automation
- ◆ Solar power generation
- ◆ PV solar monitoring equipment
- ◆ Industrial ovens
- ◆ Motor drive controls
- ◆ Panel builders
- ◆ Food processing
- ◆ Oil extraction controllers
- ◆ LED architectural lighting
- ◆ Process I/O controllers
- ◆ Solar inverter controllers

### Features

- ◆ Easy to install
- ◆ Wide temperature range
- ◆ Wide input range
- ◆ High quality
- ◆ Industrial certification
- ◆ Parallelable
- ◆ Isolated

## AC Input Power Supplies

AC Input Power Supplies Series	Input	Output Power (W)								
		10	15	25/30	50/60	100	120	240	480	960
DPP15-100	Single Phase									
DPP120-960	Single or 3 Phase									
DSP10-100	Single Phase									
DRB15-480	Single Phase									
DRF120-960	Single Phase									
DRL10-100	Single Phase									

## Easy Mounting





## AC-DC Power Supplies



### DRB15-100 Series



#### 15-100W DIN Rail Mount Power Supplies

- ◆ Compact Size
- ◆ 5V, 12V, 15V, 24V, or 48V Outputs
- ◆ High Efficiency (Up to 91%)
- ◆ ErP Compliant Design
- ◆ Low No Load Power Draw
- ◆ Class 2 Models to UL1310
- ◆ Class 1 Div 2 for Hazardous Locations



### DRB120-480 Series



#### 480W DIN Rail Mount Power Supply

- ◆ Compact Size, Narrow Width
- ◆ 24V, or 48V Output
- ◆ High Efficiency (>93% at 230VAC)
- ◆ Conservatively Rated Electrolytic Capacitors
- ◆ Curve B EMC
- ◆ Three Year Warranty



### DRL Series



#### 10-100W Low Profile DIN Rail Mount Power Supplies

- ◆ Low Profile for Building Automation
- ◆ 12V, 15V, or 24V Outputs
- ◆ Class II Double Insulation
- ◆ High Efficiency (Up to 90%)
- ◆ ErP Compliant Design
- ◆ Low No Load Power Consumption
- ◆ Class 2 Models to UL1310
- ◆ SEMI F47 Compliant



### DRF Series



#### 120-960W DIN Rail Mount Power Supplies

- ◆ Very Compact Size
- ◆ 24V Output
- ◆ High Efficiency (Up to 94%)
- ◆ 150% Peak Power Capability for 4s
- ◆ ErP Compliant Design
- ◆ Low Standby Power Draw
- ◆ Remote On/Off
- ◆ Remote Voltage Adjustment
- ◆ Hazardous Location Option (/HL)



### DSP Series

#### 7.5-100W Low Profile DIN Rail Mount Power Supplies

- ◆ Low Profile for Building Automation
- ◆ 5V, 12V, 15V, or 24V Outputs
- ◆ Wide Range AC Input
- ◆ UL1310 Class 2
- ◆ Class II Double Insulation
- ◆ -25 to +71°C Operation



### DSP30-244/277A Series

#### 30W 90-304VAC Input DIN Rail Power Supply

- ◆ Low Profile for Building Automation
- ◆ 24V Output
- ◆ Wide Range AC Input (90-304VAC)
- ◆ Evaluated to NEC NFPA70 Class 2 Output
- ◆ Class II Double Insulation
- ◆ AC Line Frequency Sync Signal
- ◆ -25 to +71°C Operation



## DPP15-100 Series



### 15-100W, DIN Rail Mount Power Supplies

- ◆ Low Cost
- ◆ 5V, 12V, 15V, 24V, or 48V Outputs
- ◆ Universal Input
- ◆ NEC NFPA70 Class 2
- ◆ UL508 Listed
- ◆ Class 1, Division 2 (ISA 12.12)
- ◆ -10 to +71°C Operation



## DPP120-480 Series



### 120W-480W Din Rail Mount Power Supplies

- ◆ Low Cost
- ◆ 12V, 24V or 48V Outputs
- ◆ Wide Range AC Input
- ◆ Parallel Function Switch
- ◆ UL508 Listed
- ◆ -40 to 71°C Operation



## DPP120-960 Series



### 120W, 240W, 480W & 960W 3 Phase DIN Rail Mount Power Supplies

- ◆ Low Cost
- ◆ 12V, 24V or 48V Outputs
- ◆ Wide Range 340 to 575VAC Input
- ◆ Parallel Function Switch (240 & 480W)
- ◆ Current Share (960W)
- ◆ -40 to +71°C Operation



## DRM40 Series



### Din Rail Redundancy Module

- ◆ 40A Maximum Output Current
- ◆ 150% Peak Load (60A)
- ◆ Dual Input (2 x 20A)
- ◆ Reverse Input Protection
- ◆ Current Balancing / DC OK LED's
- ◆ Five Year Warranty

## Drop Mode Current Sharing

If two or more supplies are to be connected together to produce more power or share the load, then a parallel-capable model should be selected. TDK-Lambda's DPP100, 120, 240 and 480 models are all parallel-capable.

On the front of each power supply is a small black switch. For parallel operation, this switch should be set to "parallel" (Fig. 1).



Figure 1

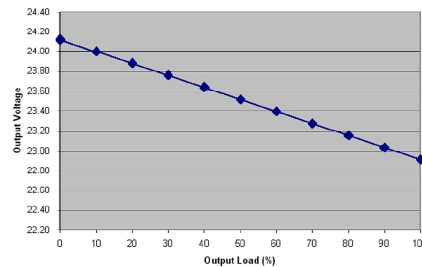


Figure 2

In single mode, the load regulation (the amount the output voltages changes with load) is minimal, with the difference being less than 0.24V from zero load to full load for a 24V output power supply.

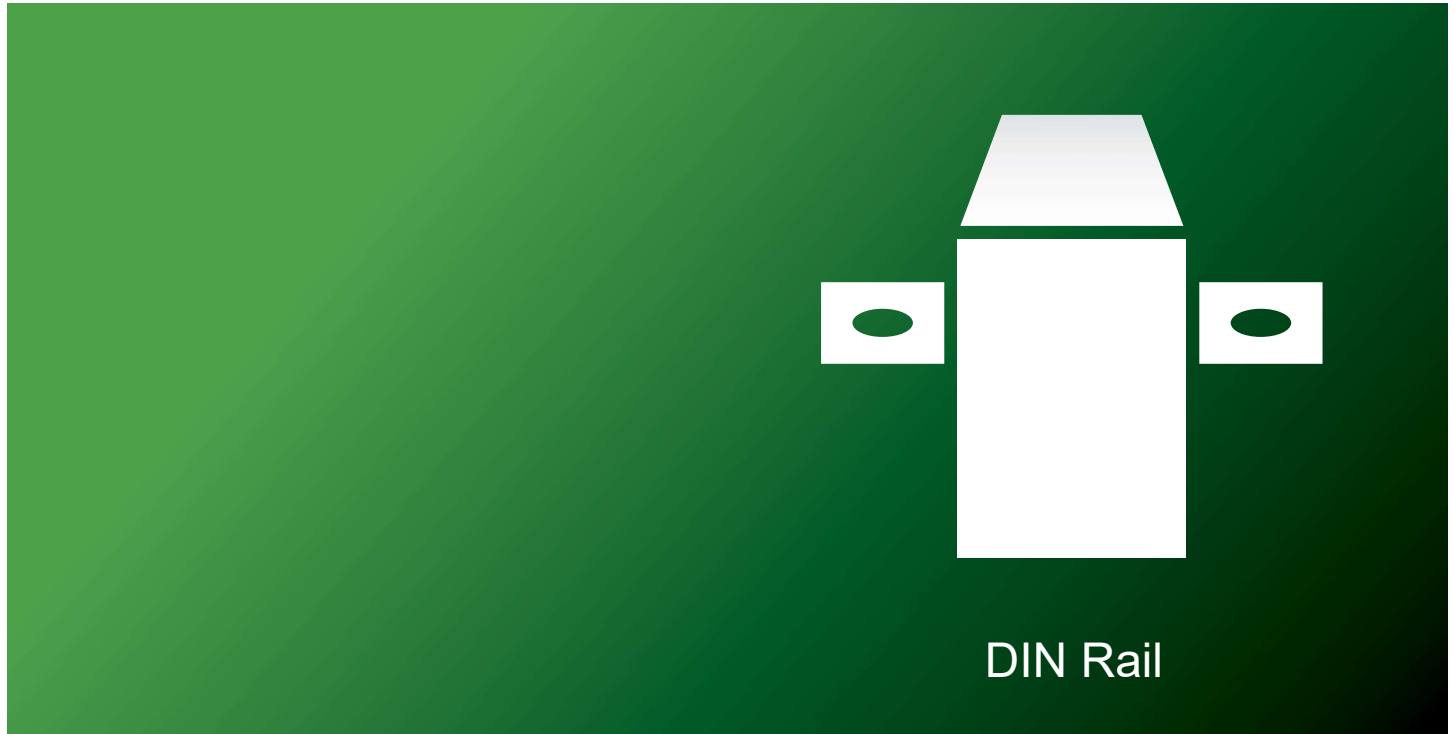
In parallel mode, that load regulation is artificially increased to 1.2V using internal circuitry (Fig. 2).

The extra voltage drop, or "droop," is proportional to the load drawn, so that when two or more power supplies are connected in parallel, the output load is shared between the power supplies. If one of the paralleled power supplies provides more current, its output will droop slightly, and the other supplies will balance.

For optimal performance, all power supplies should have their outputs set to the same voltage.



## DC-DC DIN Rail Products



### Applications

- ◆ Factory automation
- ◆ Ground radar
- ◆ Wireless hubs
- ◆ Digital signage
- ◆ Utility substation back-up
- ◆ Geological surface test equipment
- ◆ Paint spraying equipment
- ◆ Battery management
- ◆ Amplifiers
- ◆ Solar inverters
- ◆ Test & measurement
- ◆ Panel builders
- ◆ Hospital power monitoring
- ◆ Programmable logic controllers
- ◆ Imaging systems
- ◆ Yacht control systems
- ◆ Oil field controllers
- ◆ Fork lift camera systems
- ◆ Remote monitoring systems
- ◆ Solar arrays
- ◆ Smart building automation
- ◆ Automated doors
- ◆ High temperature metal furnaces

### Features

- ◆ Single, dual and triple output models.
- ◆ Six-sided EMI shielding
- ◆ Isolated

# DC-DC Power Supplies



## DPX Series

### 40-60W Single, Dual & Triple Output DIN Mount DC-DC Converters

- ◆ DIN Rail Mount Version of TDK-Lambda's PX Series
- ◆ 1600VDC Input to Output Isolation
- ◆ Wide Operating Temperature Range
- ◆ Internally Protected
- ◆ All In One Package

## DC Input Power Supplies

DC Input Power Supplies Series		Output Power (W)					# of Outputs
Input		15	20	30	40	60	
DPX15W*	9.5-36V or 18-75V						1 or 2
DPX20W*	9.5-36V or 18-75V						1 or 2
DPX30W*	10-40V or 18-75V						1 or 2
DPX40W	9.5-36V or 18-75V						1 or 2
DPX40	9.5-18V, 18-36V or 36-75V						1, 2, or 3
DPX60	9.5-36V or 18-75V						1

\*Special order

## Want Engineering Support?

- ◆ Please call **1-800-LAMBDA-4 (1-800-526-2324)** to speak to our inside technical support team, or email [lambda.techsupport@us.tdk-lambda.com](mailto:lambda.techsupport@us.tdk-lambda.com).
- ◆ TDK-Lambda's Field Application Engineers are available for unlimited support at your facility. Please contact your local TDK-Lambda salesperson to schedule a visit.

