



## POWER SUPPLIES



### **DSP PSU Range**

#### **24V Isolated Mains Power Supply**

- 85-264Vac Operation
- 10 & 30W variants
- Short Circuit Protected

DSP10-24      90-264VAC In, 24VDC Out 10W  
DSP30-24      85-264VAC In, 24VDC Out 30W



### **DPP PSU Range**

#### **24V Isolated Mains Power Supply**

- 85-264Vac Operation
- 15, 30, 50, 100 and 240W variants
- Short Circuit Protected

DPP15-24      90-264VAC In, 24VDC Out 15W  
DPP240-24      85-264VAC In, 24VDC Out 240W



### **PSU-24 24VA Isolated Mains Power Supply**

- 90-260Vac Operation
- 24W
- Short Circuit Protected

PSU24-XL-3      85-260VAC In, 24VDC Out



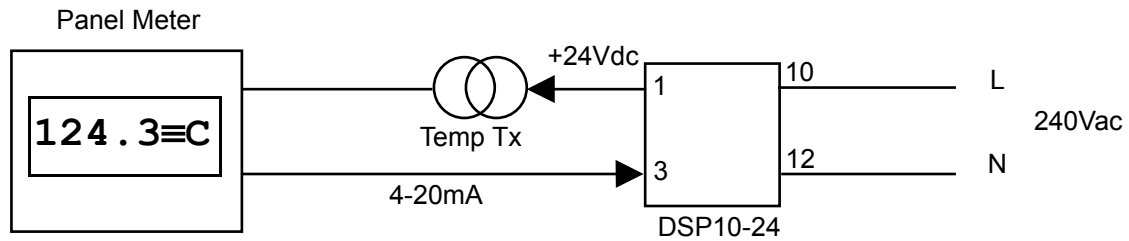
### **DC-15 15W Isolated DC to DC Converter**

- Isolated  $\pm 12$ Vdc or 24Vdc Output
- 15W
- Full Input / Output Protection

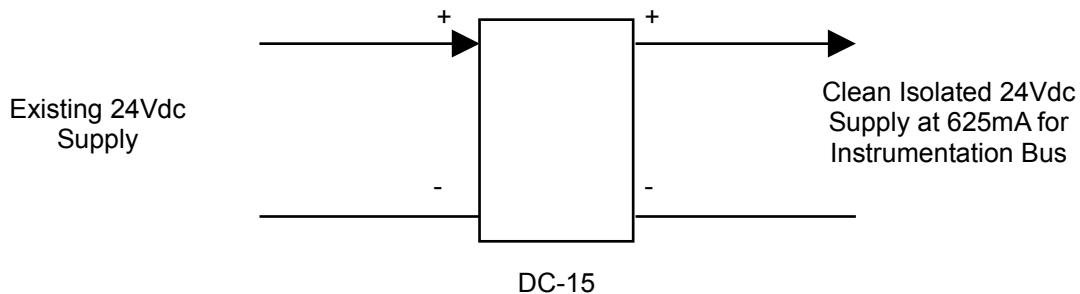
DC15-24DC/24DC      24VDC In & Out DC/DC  
Others available, please call



# TYPICAL APPLICATIONS



**DSP10-24 used to power a Temperature Transmitter Loop from a 240Vac Supply**







**DC-15 used to provide a clean isolated 24Vdc for the Instrumentation side of a Motor Control Centre**



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### *Data Sheets*

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## DSP Range

### 10W & 30W ISOLATED MAINS POWER SUPPLY UNIT

- 90 to 264 Vac Operation
- 10W or 30W Output
- Short Circuit Protected
- Safety to UL1310 Class 2
- Range of Output Voltages Available



#### Description

The power supply is a mains input, DC output DIN rail mounted power supplies. A wide range (90 to 264Vac) mains voltage input is standard with an output voltage of 24Vdc as standard.

All outputs are protected by current limiting, ensuring short circuit proof operation.

Typical applications for this power supply include powering multiple transmitters, other control and instrumentation devices and as an auxiliary supply for small control panels.

The DSP10-24 power supply is housed in a compact DIN rail mounting enclosure only 18mm wide.

#### Inputs

##### Recommended Operating Conditions

Input Voltage Range	90 to 264 Vac
Output Voltage Range	24 Vdc others available
Output Power	10W or 30W

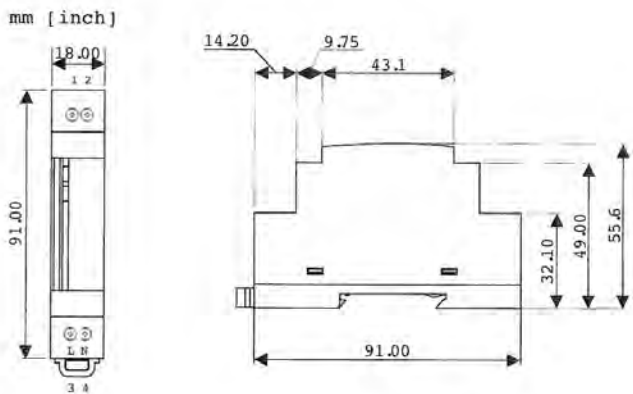
##### Environmental Conditions

Storage Temperature	-25 to 85 °C
Operating Ambient	-25 to 60 °C
Relative Humidity	20 to 95% RH



## Performance Characteristics

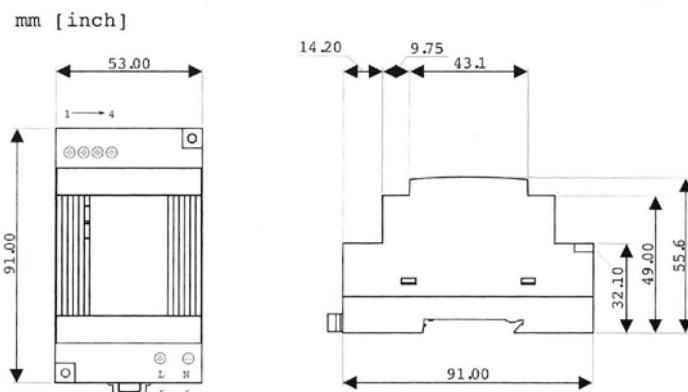
Parameter	Min	Typ	Max	Comments
Supply Voltage	90VAC		264VAC	50/60 Hz
Supply Current			525mA rms	At 240Vac supply
Output Voltage		24V		Other options available
Output Current			0.42 A	Or 1.25W for 30W unit
Operating Ambient	-25°C		60°C	
Relative Humidity	20%		95%	
Notes	Absolute maximum ratings indicate sustained limits beyond which damage to the device may occur. Device is protected against reverse polarity connection. Device is protected against output short circuit			



**DSP10-24 Dimensions**

## Installation Data

<b>Mounting</b>	DIN Rail TS35
<b>Orientation</b>	Any
<b>Connections</b>	Screw Clamp with pressure plate
<b>Conductor size</b>	0.5-4.0mm
<b>Insulation Stripping</b>	12mm
<b>Weight</b>	DSP10 60g DSP30 200g



**DSP30-24 Dimensions**

## Connection Details

- 3. Power Supply Live
- 4. Power Supply Neutral
- 1. Output +ve
- 2. Output -ve

## Ordering Information

**Please supply:**

**Part Number:**  
**10W Version** DSP10-24  
**30W Version** DSP30-24

**Output Voltage:** e.g. 24Vdc



# DPP RANGE

## ISOLATED MAINS POWER SUPPLY UNIT

- 85 to 264 Vac Operation
- 15W, 30W, 50W, 100W & 240W Output
- Short Circuit Protected
- Safety to UL1310 Class 2
- Range of Output Voltages Available



### Description

The power supply is a mains input, DC output DIN rail mounted power supplies. A wide range (85 to 264Vac) mains voltage input is standard with an output voltage of 24Vdc as standard.

All outputs are protected by current limiting, ensuring short circuit proof operation.

Typical applications for this power supply include powering multiple transmitters, other control and instrumentation devices and as an auxiliary supply for small control panels.

The DPP15-24 power supply is housed in a compact DIN rail mounting enclosure only 23mm wide.

### Inputs

#### Recommended Operating Conditions

Input Voltage Range	85 to 264 Vac
Output Voltage Range	24 Vdc others available
Output Power	DPP15-24 15W
	DPP30-24 30W
	DPP50-24 50W
	DPP100-24 100W
	DPP240-24 240W

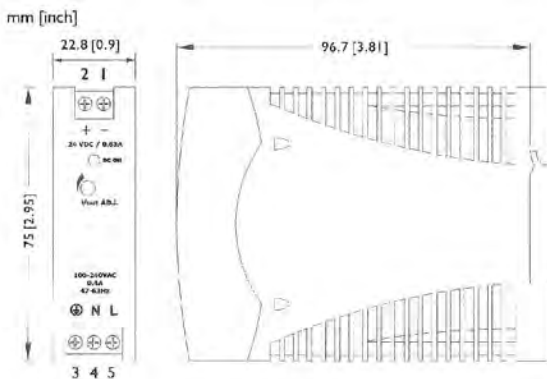
#### Environmental Conditions

Storage Temperature	-25 to 85 °C
Operating Ambient	-10 to 60 °C
Relative Humidity	20 to 90% RH

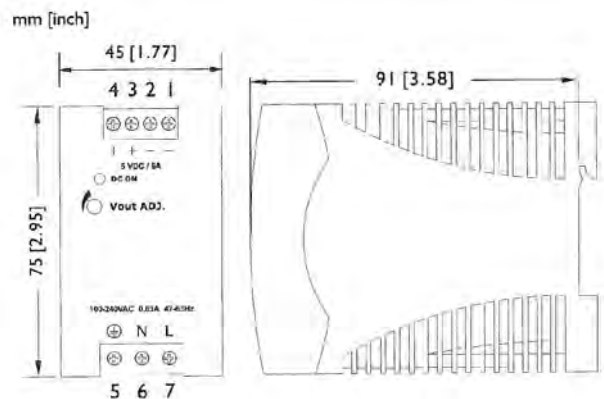


## Performance Characteristics

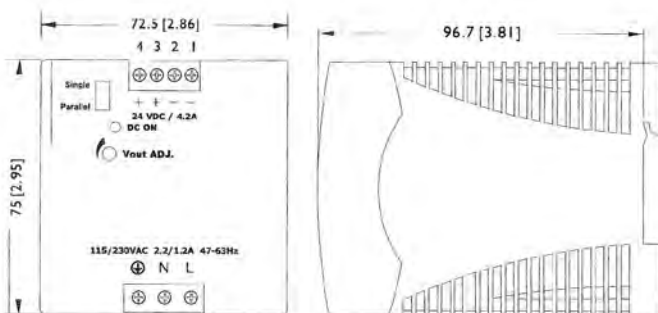
Parameter	Min	Typ	Max	Comments
Supply Voltage	85VAC		264VAC	50/60 Hz
Supply Current			788mA rms	DPP15-24 @ 240Vac supply
			1.55A rms	DPP30-24 @ 240Vac supply
			2.44A rms	DPP50-24 @ 240Vac supply
			4.83A rms	DPP100-24 @ 240Vac supply
			11.72 rms	DPP240-24 @ 240Vac supply
Output Voltage		24V		Other options available
Output Current			0.63 A	1.3A, 2.1A, 4.2A through the range
Operating Ambient	-10°C		60°C	
Relative Humidity	20%		90%	
Notes	Absolute maximum ratings indicate sustained limits beyond which damage to the device may occur. Device is protected against reverse polarity connection. Device is protected against output short circuit			



**DPP15-24 Dimensions**



**DPP30-24 & DPP50-24 Dimensions**



**DPP100-24 Dimensions**

## Installation Data

<b>Mounting</b>	DIN Rail TS32/35
<b>Orientation</b>	Any
<b>Connections</b>	Screw Clamp with pressure plate
<b>Conductor size</b>	0.5-4.0mm
<b>Insulation Stripping</b>	12mm
<b>Weight</b>	DPP15-24 130g DPP30-24 260g DPP50-24 260g DPP100-24 390g

## Connection Details

- 5. (7) Power Supply Live
- 4. (6) Power Supply Neutral
- 3. (5) Power Supply Earth

- 1. (1&2) Output -ve
- 2. (3&4) Output +ve

First column for DPP15-24

Bracketed numbers for DPP30, DPP50 & DPP100/240

## Ordering Information

**Please supply:**

<b>Part Number:</b>	DPP15-24
	DPP30-24
	DPP50-24
	DPP100-24
	DPP240-24
<b>Output Voltage:</b>	e.g. 24Vdc



# PSU-24

## 24VA ISOLATED MAINS POWER SUPPLY UNIT

- 90 to 260 Vac Operation
- 24W Output
- Short Circuit Protected
- Safety to EN 61010-1
- Range of Output Voltages Available



### Description

The PSU range is a family of mains input, DC output DIN rail mounted power supplies. 115 and 230 Vac input options are available with an output voltage of 24Vdc as standard.

All outputs are protected by current limiting, ensuring short circuit proof operation.

Typical applications for the PSU include powering multiple transmitters, other control and instrumentation devices and as an auxiliary supply for small control panels.

The PSU-24 power supply is housed in a compact DIN rail mounting enclosure only 33mm wide, and complies with VDE 0871 Curve B for conducted EMI.

### Inputs

#### Recommended Operating Conditions

Input Voltage Range	90 to 260 Vac
Output Voltage Range	24 Vdc others available
Output Power	24W

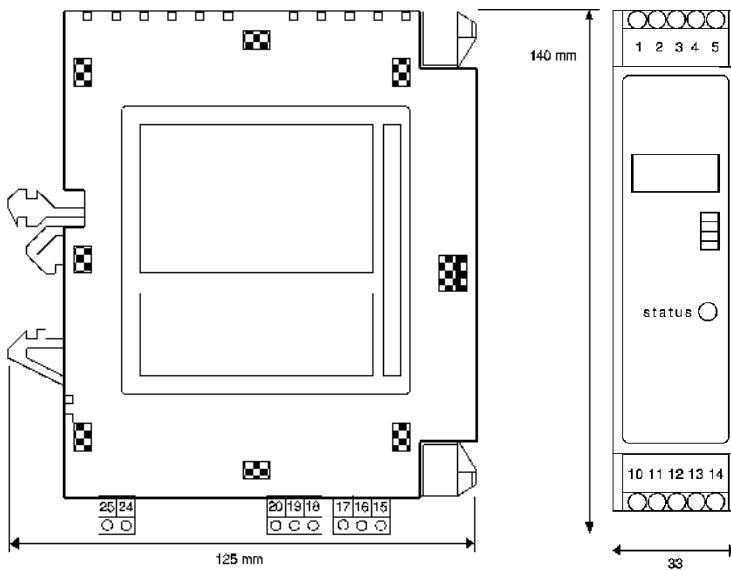
#### Environmental Conditions

Storage Temperature	-40 to 70 °C
Operating Ambient	0 to 40 °C
Relative Humidity	0 to 90 % RH



## Performance Characteristics

Parameter	Min	Typ	Max	Comments
Supply Voltage	85Vrms		270Vrms	50/60 Hz
Supply Current			250mA rms	At 240Vac supply
Output Voltage		24V		Other options available
Output Current			1A	
Operating Ambient	0°C		40°C	
Relative Humidity	0%		90%	
Surge Voltage	2.5kV for 50µS			Transient of 10kV/µS
Notes	Absolute maximum ratings indicate sustained limits beyond which damage to the device may occur. Device is protected against reverse polarity connection. Device is protected against output short circuit <b>IMPORTANT:</b> An anti-surge fuse of 1A (T1A) with a voltage rating of 250V and a breaking capacity of 35A at 250Vac is fitted. Replace only with the same type and rating..			



### Installation Data

<b>Mounting</b>	DIN Rail TS32/35
<b>Orientation</b>	Any
<b>Connections</b>	Screw Clamp with pressure plate
<b>Conductor size</b>	0.5-4.0mm
<b>Insulation Stripping</b>	12mm
<b>Weight</b>	Approx 260g

### Connection Details

- 10. Power Supply Live
- 12. Power Supply Neutral
- 14. Power Supply Earth
  
- 1. Output -ve
- 5. Output +ve

### Ordering Information

- Please supply:**
- Part Number:** PSU-24
- Output Voltage:** e.g. 24Vdc



## DC-15

### 15W DC-DC CONVERTER

- Gives Isolated  $\pm 12\text{Vdc}$  or  $24\text{Vdc}$  supply from non-isolated input
- Isolation to  $500\text{Vdc}$
- Compact DIN-Rail Mounting
- Full Input / Output Protection
- Other Voltage Options Available



#### Description

The DC-15 DC-DC Converter accepts a  $24\text{V}$  dc supply and generates an isolated  $\pm 12\text{Vdc}$  voltage with an available output current of up to  $625\text{mA}$ .

The unit is typically used to provide a clean, isolated  $24\text{Vdc}$  auxiliary power supply for panel based systems. In this case the output  $0\text{V}$  terminal can be left disconnected, using the output  $+ve$  and  $-ve$  instead.

If required an output enable option can be fitted. In this case a logic signal of  $5\text{V}$  to  $24\text{Vdc}$  can be used to enable the output of the converter remotely.

#### Inputs

#### Recommended Operating Conditions

Input Voltage	20 to $34\text{Vdc}$ or 16 to $24\text{Vac rms}$
Output Voltage	$\pm 12\text{Vdc}$ / $24\text{Vdc}$ (others available)
Output Power	15W

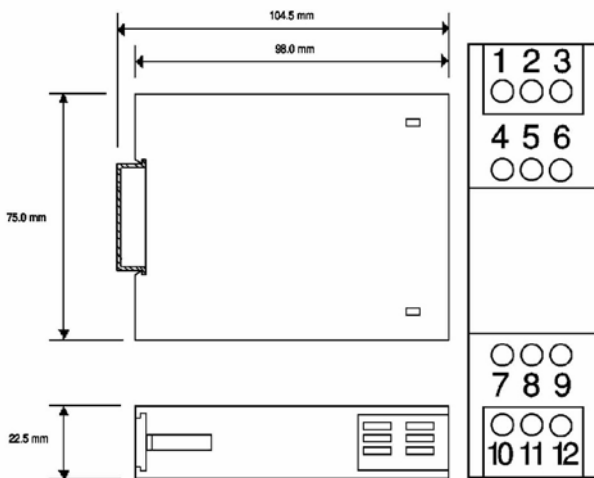
#### Environmental Conditions

Storage Temperature	$-40$ to $85\text{ }^\circ\text{C}$
Operating Ambient	$0$ to $45\text{ }^\circ\text{C}$
Relative Humidity	$0$ to $90\text{ \% RH}$



## Performance Characteristics

Parameter	Min	Typ	Max	Comments
Supply Voltage		24Vdc		
Supply Current			650mA	At 24Vdc supply
Output Voltage		±12Vdc		Other options available
Output Current			625mA	
Output Enable Voltage	4Vdc		40Vdc	Output enabled if voltage present
Output Enable Current	2mA		20mA	Output enabled if current present
Operating Ambient	0°C		40°C	
Relative Humidity	0%		90%	
Notes	Absolute maximum ratings indicate sustained limits beyond which damage to the device may occur. Device is protected against reverse polarity connection and output short circuit.			



## Installation Data

<b>Mounting</b>	DIN Rail TS35
<b>Orientation</b>	Any
<b>Connections</b>	Screw Clamp with pressure plate
<b>Conductor size</b>	0.5-4.0mm
<b>Insulation Stripping</b>	12mm
<b>Weight</b>	Approx 120g

## Connection Details

- 5. Power Supply +ve
- 4. Power Supply -ve
- 3. Output Enable +ve
- 6. Output Enable -ve
- 9. Output +ve
- 8. Output 0V
- 7. Output -ve

## Ordering Information

**Please supply:**

<b>Part Number:</b>	DC-15
<b>Input Voltage:</b>	e.g. 24Vdc
<b>Output Voltage:</b>	e.g. 24Vdc
<b>Output Enable Option:</b>	Yes / No