

## 15-90W High Reliability Linear Power Supplies

### Features

- ◆ Single and Dual Outputs
- ◆ Excellent Line & Load Regulation
- ◆ Remote Programming and Current Share (NNS)
- ◆ Front Panel Voltage Taps
- ◆ Thermal Protection
- ◆ Five Year Warranty
- ◆ Low Output Ripple
- ◆ Fully Featured
- ◆ Operation from -20 to +71°C Ambient



### Key Market Segments & Applications



Specifications		NNS15	NNS30	NNS50	NND15	NND30
AC Input	VAC	85~115, 98~132, 170~230, 195~265VAC (Front panel selectable)				
Input Frequency	Hz	47~440Hz				
EMI	-	FCC Class B, VDE0871 Level B				
Output Adjustment	-	±10%				
Remote Sense	-	Yes	Yes	Yes	None	
Remote Programming	-	1000 Ohm/Volt			None	
Parallel Operation	-	Via PC Terminal			None	
Output Indicator	-	LED = On				
Line Regulation	%	0.01%				
Load Regulation	%	0.03%				
Cross Regulation	%	Not applicable			0.03%	
Ripple and Noise	mV	1mV rms, 3mV peak to peak				
Overcurrent Protection	%	105 to 130%				
Overvoltage Protection	VDC	5V: 6 ~ 7.2V, 12V: 14.5 ~ 17.2V, 15V: 18.1 ~ 21.5V, 24V: 29 ~ 34.3V				
Cooling	-	Convection				
Operating Temp. Range	°C	-20°C: 60%, 0 to 50°C: 100%, 60°C: 60%, 71°C: 40%				
Storage Temperature	°C	-40 to +85°C				
Temperature coefficient	%	±0.02% per °C				
Humidity (non condensing)	%RH	Operating: 20 - 95% RH, Non operating: 10 - 95% RH				
Vibration	-	10-55Hz Amplitude (sweep for 1 min), <2G X, Y, Z 1 hour each				
Shock	-	<20G				
Safety Agency Approval	-	UL60950-1, CSA60950-1, EN60950-1, CE Mark				
Withstand Voltage	-	Input to Output: 3.75kVAC, Input to Chassis: 2.5kVAC for 1 minute				
Isolation Resistance	-	>100M at 500VDC @ 25C & 70%RH for 1 minute				
Weight	g	1750	2930	4200	1750	2750
Size WxHxD	mm	60x124x124	80x124x178	97x113x200	60x113.5x150	80x113.5x164
Warranty	yrs	Five years				

Note: See Installation Manual for full details, test methods of parameters and application notes

## Model Selector

	Model	O/P	O/P(V)	Max Cur.(A)	Max Pwr(W)	Eff. (%)
Single Output	NNS155	V1	5	3.0	15.0	35
	NNS305	V1	5	6.0	30.0	35
	NNS505	V1	5	10.0	50.0	42
	NNS1512	V1	12	1.7	20.4	45
	NNS3012	V1	12	4.0	48.0	45
	NNS5012	V1	12	6.5	78.0	51
	NNS1515	V1	15	1.4	21.0	46
	NNS3015	V1	15	3.4	51.0	46
	NNS5015	V1	15	5.5	82.5	53
	NNS1524	V1	24	0.9	21.6	50
Dual Output	NND15-1212	V1	+12	0.75	18.0	45
		V2	-12	0.75		
	NND30-1212	V1	+12	1.6	38.4	45
		V2	-12	1.6		
	NND15-1515	V1	+15	0.6	18.0	45
		V2	-15	0.6		
	NND30-1515	V1	+15	1.3	39.0	45
		V2	-15	1.3		

## NND15 Outline Drawing



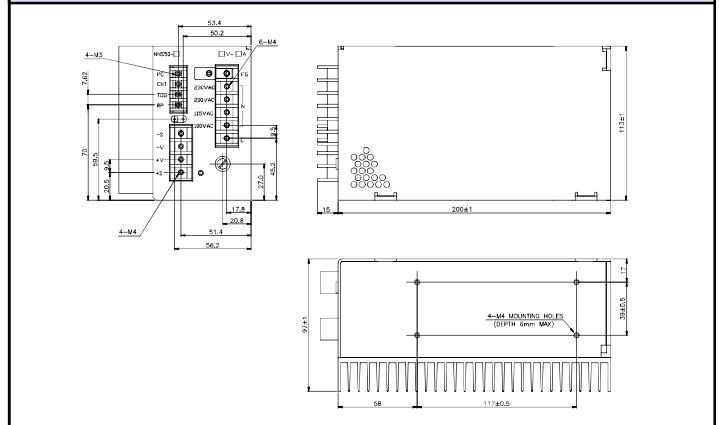
## NND30 Outline Drawing



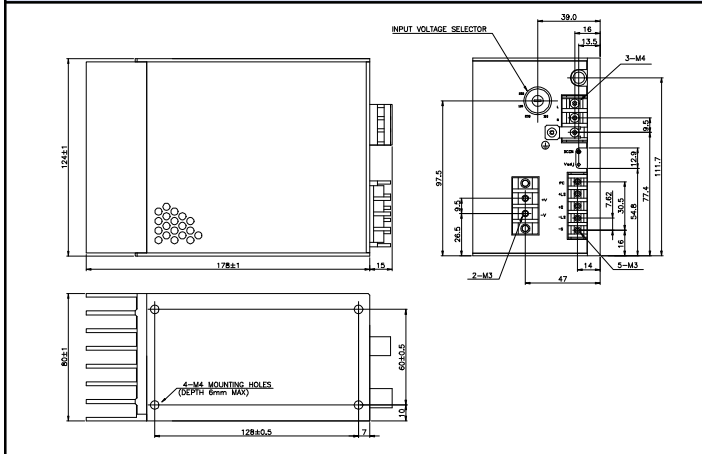
## NNS15 Outline Drawing



## NNS50 Outline Drawing



## NNS30 Outline Drawing



## Other Industrial Products

- HWS 15 to 1500W Single output, universal input switching
- ZWS 5 to 150W single output, universal input (switching)
- VSB & VSC 10 to 150W single output, 115VAC input (switching)

For Additional Information, please visit  
<https://product.tdk.com/info/en/products/power/index.html>



## 15-90W High Reliability Linear Power Supplies

### Features

- ◆ Single and Dual Outputs
- ◆ Excellent Line & Load Regulation
- ◆ Remote Programming and Current Share (NNS)
- ◆ Front Panel Voltage Taps
- ◆ Thermal Protection
- ◆ Five Year Warranty
- ◆ Low Output Ripple
- ◆ Fully Featured
- ◆ Operation from -20 to +71°C Ambient



### Key Market Segments & Applications



Specifications			NNS15	NNS30	NNS50	NND15	NND30
AC Input	VAC	85~115, 98~132, 170~230, 195~265VAC (Front panel selectable)					
Input Frequency	Hz	47~440Hz					
EMI	-	FCC Class B, VDE0871 Level B					
Output Adjustment	-	±10%					
Remote Sense	-	Yes	Yes	Yes	None		
Remote Programming	-	1000 Ohm/Volt				None	
Parallel Operation	-	Via PC Terminal				None	
Output Indicator	-	LED = On					
Line Regulation	%	0.01%					
Load Regulation	%	0.03%					
Cross Regulation	%	Not applicable				0.03%	
Ripple and Noise	mV	1mV rms, 3mV peak to peak					
Overcurrent Protection	%	105 to 130%					
Overvoltage Protection	VDC	5V: 6 ~ 7.2V, 12V: 14.5 ~ 17.2V, 15V: 18.1 ~ 21.5V, 24V: 29 ~ 34.3V					
Cooling	-	Convection					
Operating Temp. Range	°C	-20°C: 60%, 0 to 50°C: 100%, 60°C: 60%, 71°C: 40%					
Storage Temperature	°C	-40 to +85°C					
Temperature coefficient	%	±0.02% per °C					
Humidity (non condensing)	%RH	Operating: 20 - 95% RH, Non operating: 10 - 95% RH					
Vibration	-	10-55Hz Amplitude (sweep for 1 min), <2G X, Y, Z 1 hour each					
Shock	-	<20G					
Safety Agency Approval	-	UL60950-1, CSA60950-1, EN60950-1, CE Mark					
Withstand Voltage	-	Input to Output: 3.75kVAC, Input to Chassis: 2.5kVAC for 1 minute					
Isolation Resistance	-	>100M at 500VDC @ 25C & 70%RH for 1 minute					
Weight	g	1750	2930	4200	1750	2750	
Size WxHxD	mm	60x124x124	80x124x178	97x113x200	60x113.5x150	80x113.5x164	
Warranty	yrs	Five years					

Note: See Installation Manual for full details, test methods of parameters and application notes

