



25 ~ 30 Watts DIP Type Wide Input DC - DC Converters

FEATURES

- ♦ 25-30W Isolated Output
- ♦ Fixed 200KHz Switching Frequency
- ♦ Remote On/Off Control
- ♦ Six-Sided Shield Metal Case
- ♦ Efficiency to 84%
- ♦ Regulated Outputs

SPECIFICATIONS

Input Voltage Range..... 2:1/4:1.....See Note1
 Input Filter..... Pi Type
 Voltage Balance(Dual)..... $\pm 1.0\%$ max.
 Transient Response
 Single, 25% Step Load Change..... <500u Sec.
 Dual- FL-1/2L $\pm 1\%$ Error Band..... <500u Sec.
 External Trim Adj. Range..... $\pm 10\%$
 Ripple & Noise (20MHz BW) 10mV RMS max. ; 75mV p-p max.
 Temperature Coefficient..... $\pm 0.02\%/^{\circ}\text{C}$
 Short Circuit Protection..... Continuous
 Line Regulation¹, Single/Dual..... $\pm 0.2\%$ max.
 Triple..... $\pm 1.0\%$ max.
 Load Regulation², Single/Dual..... $\pm 1.0\%$ max.
 Triple..... $\pm 5.0\%$ max.
 Efficiency..... See Table
 Isolation Voltage..... 500VDC min.
 Isolation Resistance..... 10^9 ohms
 Switching Frequency..... 200KHz, typ.
 Operating Ambient Temperature Range..... $-25^{\circ}\text{C} \sim +71^{\circ}\text{C}$
 Case Temperature..... 100°C max.
 Cooling..... Natural Convection
 Storage Temperature Range..... -55°C to $+105^{\circ}\text{C}$
 EMI/RFI..... Six-Sided Continuous Shield
 Case Material: Black Coated Copper with Non-Conductive Base
 Dimensions..... 2.56x3.00x0.83 Inches (65.0x76.2x21.1mm)
 Weight 1.75g

Note:

(1) Measured from high line to low line

(2) Measured from full load to 1/4 load

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	EFF. %
ER25-x1	See Note	5	5000	77
ER30-x2	See Note	12	2500	79
ER30-x3	See Note	15	2000	79
ER30-x5	See Note	± 12	± 1250	81
ER30-x6	See Note	± 15	± 1000	81
ER30-x7	See Note	$5/\pm 12$	$3000/\pm 625$	78
ER30-x8	See Note	$5/\pm 15$	$3000/\pm 500$	78
ER30-x7A	See Note	$+5/+12/-5$	$3000/600/1000$	77

Note:

x=1, Input Voltage= 9~18VDC, Nominal=12VDC

x=2, Input Voltage= 18~36VDC, Nominal=24VDC

x=3, Input Voltage= 36~72VDC, Nominal=48VDC

x=4, Input Voltage= 9~36VDC, Nominal=24VDC

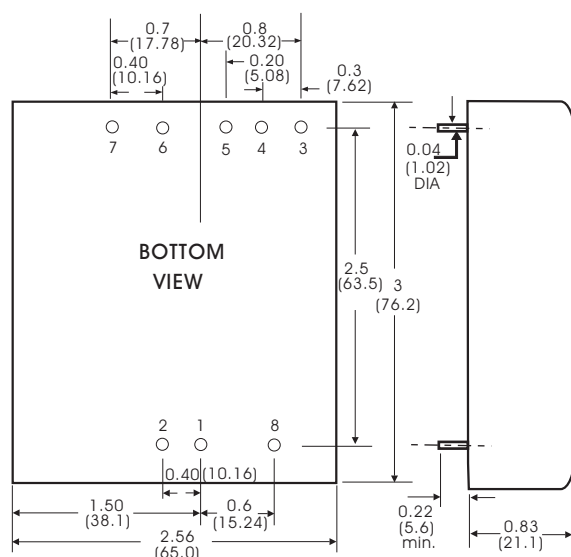
x=5, Input Voltage= 18~72VDC, Nominal=48VDC

TRIPLE OUTPUT LOADING TABLE (1*)			
Output (Pin No.)	Voltage (VDC)	Amperes	
		Min.(2*)	Nom.
6	+5	0.50	3.00
3 & 5	+12 & -12	0.10	0.625
3 & 5	+15 & -15	0.10	0.500
3 & 5	+12 & -5	0.10/0.10	0.60/1.0

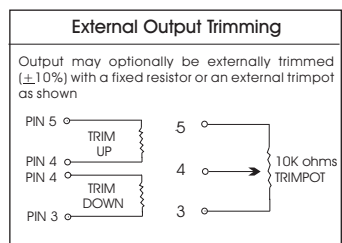
(1*) Maximum total power from all outputs is limited to 30 Watts but no output should exceed its maximum current.

(2*) Minimum current on each output is required to maintain specified regulation.

MECHANICAL DRAWING (Unit: inch(mm))



PIN CONNECTION			
Pin	Single Output	Dual Output	Triple Output
1	+Vi	+Vi	+Vi
2	-Vi	-Vi	-Vi
3	+Sense	+Vo	+Vo
4	Output Trim	Com.	Com.
5	-Sense	-Vo	-Vo
6	+Vo	NP	+5V Output
7	-Vo	NP	NP
8	Remote On/Off Control		



Remote On/Off Control

Logic Compatibility..... CMOS or Open Collector TTL
 Ec-On..... > +5.5VDC or Open Circuit
 Ec-Off..... < 1.8VDC
 Shutdown Idle Current..... 10mA
 Control Common..... Referenced to Input Minus