Series 30AC

Regulated 30 Watt AC-DC Switchers

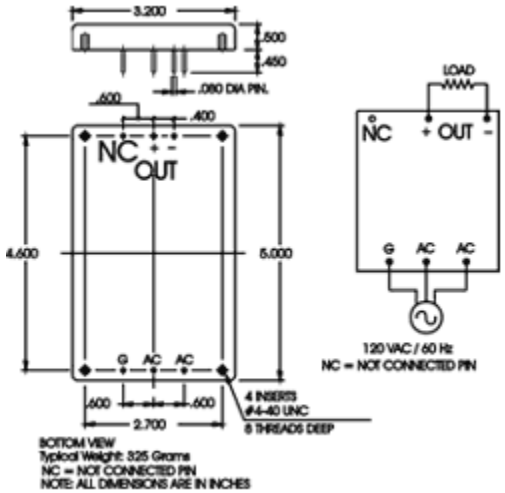
Hi Reliability Hi Efficiency/Isolated Single, Dual, and Triple Outputs

Typical Characteristics
Test Conditions: 25° C ambient
Input Voltage: 90-130 VAC OR 170 - 240 VAC (47-440 Hz)
Line/Load Regulation: See specifications below
Converter Frequency: 25-35 KHz typ
Operating Temperature: -25° C to +70° C ambient
Output Voltage Temperature Coefficient: 0.02% / ° C
Storage Temperature: -55° C. to +125° C
Isolation: 1200 VRMS
Short Circuit Protection: Continuous
This series of low profile 30 Watt AC to DC switchers come in 12 different models. These offer high efficiency and precise regulation throughout the operating temperature range of -25° C to +70° C ambient, with no heat sink or electrical heating required. The 30AC Series keeps a maximum of 0.500" height while still offering you 1200 volts RMS isolation in a rugged encapsulated case. The convenience of PC mounting and the availability of three outputs should aid your circuit design.

Features
• Low profile 0.500"
• Low weight
• Encapsulated semiconductors, conservatively rated for maximum reliability
• Excellent voltage regulation
• Excellent load regulation
• Up to 30 watts output power at 70° C ambient
• Low output ripple
• Isolation: 1200V RMS
• Single, dual and triple outputs
• No heat sink required
• Miniature size
• No output capacitor required
• Shielding

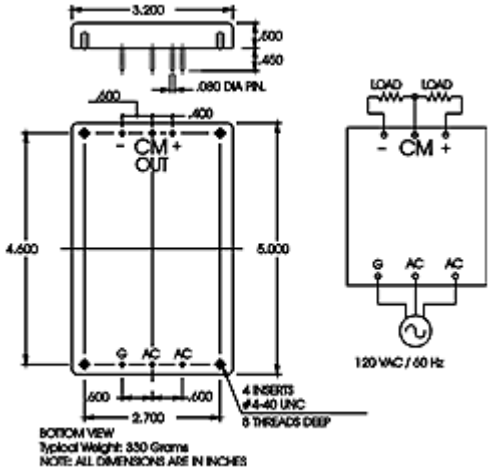
Low Capacity Option: All units can be manufactured with isolation capacity of 70pF. Contact factory.

SERIES 30AC SINGLE OUTPUT



Note: Recommended torque for mounting screws is 3 to 5 In-Lbs.
Larger Size Drawing And Schematic

SERIES 30AC DUAL OUTPUT



Note: The recommended torque for mounting screws is 3 to 5 In.-Lbs.
Larger Size Drawing And Schematic

Series 30AC Single Output
Input Voltage 90-130 VAC (47-440Hz)
(Optional 170-240VAC, 47-440 Hz)***

Pico Part No.	Output Voltage (VDC)	Max. Load Current (mA)	Max. Output Power (watts)	EFF @ Full Load Typical (%)*	Output Voltage Ripple @ Full Ld. 1-1 MHz BW mv p-p	Output Voltage Tolerance (± %)*	V LD. Reg. 10%-100% Load** (± %)*	Line Regulation (± %)*	Price (US $)
30AC5S	5	5000	25	75	50	0.5	0.5	0.2	421.74
30AC12S	12	2500	30	81	50	0.5	0.5	0.2	421.74
30AC15S	15	2000	30	82	50	0.5	0.5	0.2	421.74
30AC24S	24	1250	30	83	50	0.5	0.5	0.2	421.74
30AC28S	28	1070	30	83	50	0.5	0.5	0.2	421.74

*Readings Taken at 115VAC-60Hz. at full load
**10% minimum load required
***All units available with 170-240VAC input. Add H prefix to part number - $40 per unit cost added.

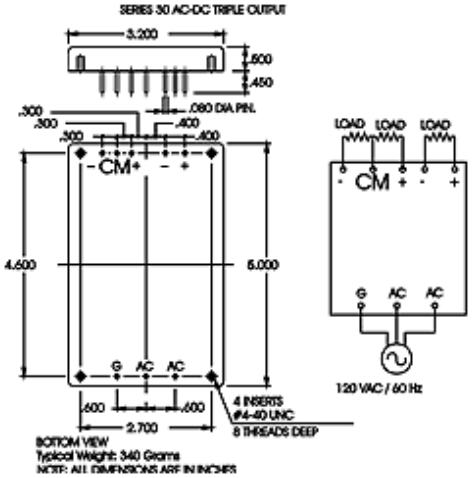
Series 30AC Dual Output
Input Voltage 90-130VAC (47-440Hz)
(Optional 170-240VAC, 47-440 Hz)***

Pico Part No.	Output Voltage (VDC)	Max. Load Current (mA) per output	Max. Output Power (watts) per output	EFF @ Full Load Typical (%)*	Output Voltage Ripple @ Full Ld. 1-1 MHz BW mv p-p	Output Voltage Tolerance (± %)* at full load each output	V LD. Reg. 10%-100% Load** (± %)*	Line Regulation (± %)* at full load each output	Price (US $)
30AC5D	± 5	2500	12.5	76	50	0.5	0.5	0.2	471.11
30AC12D	± 12	1250	15	78	50	0.5	0.5	0.2	471.11
30AC15D	± 15	1000	15	80	50	0.5	0.5	0.2	471.11

*Readings Taken at 115VAC-60Hz.
**10% minimum load required
***All units available with 170-240VAC input. Add H prefix to part number - $40 per unit cost added.

Options Available per MIL-STD-883:
- Expanded Operating temperature (-55° C to +85° C)
- Stabilization Bake: (125° C ambient)
- Temperature Cycle: -55° C. to +125° C
- Hi Temp, Burn in

SERIES 30AC TRIPLE OUTPUT



Note: The recommended torque for moutning screws is 3 to 5 In.-Lbs.

Larger Size Drawing And Schematic

Series 30AC Triple Output
Input Voltage 90-130VAC (47-440Hz)
(Optional 170-240VAC, 47-440 Hz)***

.	Main Output Voltage					Auxiliary Output Voltage					.	
Pico Part No.	**Output Voltage DC (VDC)**	**Max. Load Current (mA)**	**Max. Output Power (watts)**	**V LD. Reg. 25%-100% Load (± %)***	**Output Voltage Ripple @ Full Ld. 1-1 MHz BW mv p-p**	**Output Voltage (DC) Per Output**	**Max. Load Current (mA) Per Output**	**Max. Output Power (watts) Per Output**	**Volt. Load Reg. 25%-100% Load** (± %)***	**Output Ripple @ Full Ld. 1-1 MHz BW mv p-p***	**EFF @ Full Load Typical (%)**	**Price (US $)**
30AC5T12	5	4000	20	0.5	50	± 12	208	2.5	5	50	78	520.48
30AC5T15	5	4000	20	0.5	50	± 15	166	2.5	5	50	78	520.48
30AC12T5	12	2080	25	0.5	50	± 5	500	2.5	5	50	80	520.48
30AC15T5	15	1660	25	0.5	50	± 5	500	2.5	5	50	80	520.48
.	Common Characteristics Main Output Voltage Tolerance ± 0.5% Main Line Regulation ± 0.2%					Common Characteristics Auxiliary Output Voltage Tolerance ± 5% Auxillary Line Regulation ± 0.2%					.	

*Measurements Taken at 115VAC-60Hz.
**10% minimum load required
***All units available with 170-240VAC input. Add H prefix to part number - $40 per unit cost added.

For immediate engineering assistance or to place an order:
Call Toll Free: 800-431-1064

PICO Electronics, Inc.

143 Sparks Ave. Pelham, NY 10803
Tel: 914-738-1400
Fax: 914-738-8225