

# SC30N Series



## DC/DC

### 30 Watts

Single/Dual/Triple Outputs

- 2:1 wide input range  
18-36 Vdc  
36-75 Vdc
- Remote shutdown
- 300kHz switching frequency
- Continuous short circuit protection
- Six-sided shielding

## Specifications

### INPUT

Voltage Range	18-36Vdc 36-75Vdc
Filtering	All Models
UVLO	<32 Vdc (-48 Models)
Remote On/Off Control	All Models

### OUTPUT

Voltage Tolerance	1% Main, 2% Duals, 3% Aux
Ripple and Noise	3.3/5 50mV pk-pk All others 100mV pk-pk
Short Circuit Protection	Continuous Power Cycle
Overvoltage Protection	Latching 125%
Temperature Coefficient	0.02% / °C

### GENERAL

Regulation:	Main	Duals	Aux
Line	0.1%	0.1%	0.5%
Load	0.5%	0.5%	3.0%
Efficiency	83% (typ)		
I/O Isolation	1500 Vdc		
Switching Frequency	300khz (typ)		

### ENVIRONMENTAL

Operating Temperature	-40°C to +100°C Baseplate
Storage Temperature	-55°C to +125°C
Cooling	Free-air Convection

All specifications are typical at nominal line and full load at 25°C unless otherwise noted and are subject to change without notice.

The 30 Watt SC30N series operates over a wide input range of 18-36 Vdc or 36-75 Vdc. Efficiencies of 83% are typical over varying load conditions of 25% to 100%. Additional features include input reverse polarity protection, remote on/off control, logic compatible with CMOS or open collector TTL, short circuit protection with auto restart, overvoltage protection, and an operating range of -40°C to +100°C case temperature with no derating. Units are packaged in a six-sided continuous shielded case for EMI/RFI protection and measure 2.5" x 3.0" x 0.5".

### Applications

These units are ideally suited for telecommunications and applications having a widely varying input voltage such as automotive test equipment, process control, minicomputers and geosurvey equipment.



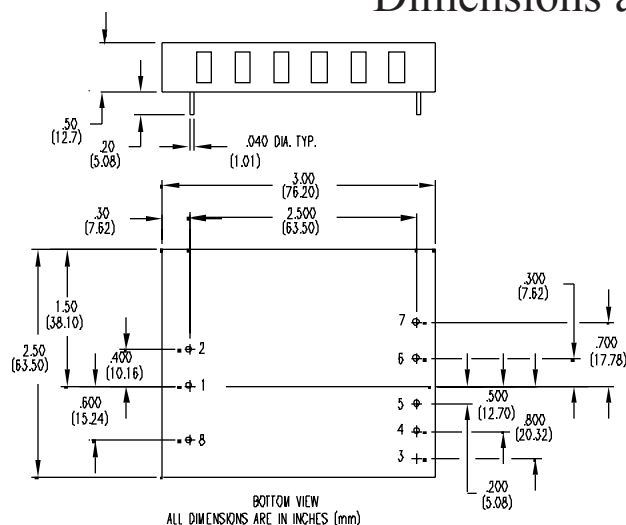
**SEMICONDUCTOR  
CIRCUITS, INC.**

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# SC30N Series Ordering Information

Input Voltage Range	Output Voltage	Output Current	Model Number
36-75 Vdc	3.3 Vdc	8000mA	SC30N17-800-48
18-36 Vdc	5 Vdc	6000mA	SC30N11-600-18
36-75 Vdc	5 Vdc	6000mA	SC30N11-600-48
18-36 Vdc	12 Vdc	2500mA	SC30N12-250-18
36-75 Vdc	12 Vdc	2500mA	SC30N12-250-48
18-36 Vdc	15 Vdc	2000mA	SC30N13-200-18
36-75 Vdc	15 Vdc	2000mA	SC30N13-200-48
18-36 Vdc	±12 Vdc	±1250mA	SC30N22-125-18
36-75 Vdc	±12 Vdc	±1250mA	SC30N22-125-48
18-36 Vdc	±15 Vdc	±1000mA	SC30N23-100-18
36-75 Vdc	±15 Vdc	±1000mA	SC30N23-100-48
18-36 Vdc	+5 / ±12Vdc	3000 / ±625mA	SC30N34-425-18
36-75 Vdc	+5 / ±12Vdc	3000 / ±625mA	SC30N34-425-48
18-36 Vdc	+5 / ±15Vdc	3000 / ±500mA	SC30N35-400-18
36-75 Vdc	+5 / ±15Vdc	3000 / ±500mA	SC30N35-400-48

## Dimensions and Connections



Pins 0.040 (1.0) dia x 0.20 (5.1) lg min.

### PIN CONNECTIONS Single Output

1. +Input
2. -Input
3. + Sense
4. Trim
5. -Sense
6. +Output
7. Common
8. Remote On/Off

### PIN CONNECTIONS Dual Outputs

1. +Input
2. -Input
3. +12 or 15 Output
4. Common
5. -12 or 15 Output
6. N/C
7. Trim
8. Remote On/Off

### PIN CONNECTIONS Triple Outputs

1. +Input
2. -Input
3. +12 or 15 Output
4. Common
5. -12 or 15 Output
6. +5 Output
7. Common
8. Remote On/Off

### NOTES:

1. Ripple measured with a 3.3µF tantalum capacitor across each output.
2. Load regulation from full load to minimum load with all other outputs at rated load.
3. Minimum current required on 5V out only.
4. Maximum total power from all outputs is 30 Watts and no output is to exceed its maximum rated current.

External Output Trimming: Output may be externally trimmed ±10% (12 Vdc and 15 Vdc, 10%/ -5% others).

Remote ON/Off Control (pin 8) common referenced to Minus input (pin 2).  
On greater than 4 Vdc or open circuit  
Off less than 1.2 Vdc

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