15 AND 30 WATTS - SI SERIES

Wide Input, Single/Dual/Triple Outputs

FEATURES

- Wide Input Voltage Range (2:1)
- Over Voltage Protection on All Models
- 12VDC Nominal Input - 25 VDC Surge,
  24VDC Nominal Input - 50VDC Surge,
  48VDC Nominal Input - 100VDC Surge
- Continuous short circuit protection - all outputs
- Efficiency: up to 85%
- Remote On/Off Control via TTL
- 85-200VDC and 170-400VDC Inputs Available

THE SI SERIES FROM WALL INDUSTRIES

The SI Series features a single case size (2.56 x 3.0 x 0.84") for every unit - 15 to 30 watts. Specifications include remote on/off, short circuit protection, Pi input filter, over-voltage protection and excellent line and load regulation. SI Series units operate at case temperatures from -25 to +85°C with no derating. Metallic case provided for shielding.

SPECIFICATIONS: SI SERIES

All specifications apply @ +25 C ambient unless otherwise noted.

INPUT SPECIFICATIONS

Input Voltages.....9-18, 18-36, 36-75VDC
Nominal Input.....12, 24, 48VDC
Input Filter.....Pi input filter
Remote On/Off Control.....Open collector TTL

OUTPUT SPECIFICATIONS

Output Current.....see table
Output Voltage Tolerance.....±1% max.
Output Trim (external).....±10%, single outputs
Line Regulation.....see note 4
Load Regulation.....see note 5
Short Circuit Protection.....continuous, all outputs
Ripple/Noise (20MHz BW).....100mV p-p
Overvoltage Protection.....see table

GENERAL SPECIFICATIONS

Efficiency.....up to 85%
Isolation Voltage (input to output).....500VDC min.
Isolation Resistance (input to output).....500MOhms
Switching Frequency.....100kHz typical

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature (case).....-25 to +85°C
Storage Temperature.....-55 to +100°C
Humidity (non-condensing).....20 - 95% R.H.

PHYSICAL SPECIFICATIONS

Shielding.....Six-sided
Weight.....7.5 oz.
Case Material.....Black coated copper
.....with non-conductive baseplate

Due to advances in technology, specifications subject to change without notice.

Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA) 15W	25W	30W	Over Voltage Protection (VDC)	Model Number 15 Watts	Model Number 25 Watts	Model Number 30 Watts
9 - 18	3.3		7575		5.1		SI12S3.3-7575	
	5	3000		6000	6.8	SI12S5-3000		SI12S5-6000
	12	1250		2500	15	SI12S12-1250		SI12S12-2500
	15	1000		2000	18	SI12S15-1000		SI12S15-2000
	24	630		1250	27	SI12S24-630		SI12S24-1250
	48[11]	310		630	51	SI12S48-310		SI12S48-630
	±5	1500		3000	6.8	SI12D5-1500		SI12D5-3000
	±12	625		1250	15	SI12D12-625		SI12D12-1250
	±15	500		1000	18	SI12D15-500		SI12D15-1000
	+5/±12	1500/310		4000/420	6.8/15	SI12T12-310		SI12T12-420
	+5/±15	1500/250		4000/340	6.8/18	SI12T15-250		SI12T15-340
18 - 36	3.3		7575		5.1		SI24S3.3-7575	
	5	3000		6000	6.8	SI24S5-3000		SI24S5-6000
	12	1250		2500	15	SI24S12-1250		SI24S12-2500
	15	1000		2000	18	SI24S15-1000		SI24S15-2000
	24	630		1250	27	SI24S24-630		SI24S24-1250
	48[11]	310		630	51	SI24S48-310		SI24S48-630
	±5	1500		3000	6.8	SI24D5-1500		SI24D5-3000
	±12	625		1250	15	SI24D12-625		SI24D12-1250
	±15	500		1000	18	SI24D15-500		SI24D15-1000
	+5/±12	1500/310		4000/420	6.8/15	SI24T12-310		SI24T12-420
	+5/±15	1500/250		4000/340	6.8/18	SI24T15-250		SI24T15-340
36 - 75	3.3		7575		5.1		SI48S3.3-7575	
	5	3000		6000	6.8	SI48S5-3000		SI48S5-6000
	12	1250		2500	15	SI48S12-1250		SI48S12-2500
	15	1000		2000	18	SI48S15-1000		SI48S15-2000
	24	630		1250	27	SI48S24-630		SI48S24-1250
	48[11]	310		630	51	SI48S48-310		SI48S48-630
	±5	1500		3000	6.8	SI48D5-1500		SI48D5-3000
	±12	625		1250	15	SI48D12-625		SI48D12-1250
	±15	500		1000	18	SI48D15-500		SI48D15-1000
	+5/±12	1500/310		4000/420	6.8/15	SI48T12-310		SI48T12-420
	+5/±15	1500/250		4000/340	6.8/18	SI48T15-250		SI48T15-340

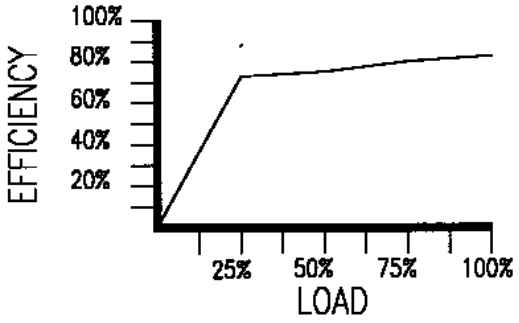
SI and SIW Series share the same dimensions.

Please refer to mechanical dimensions and pin connections of SIW Series.

NOTES:

1. All case and pin to case dimensions reference only unless otherwise noted.
2. Pins may be omitted on N/C pin functions, consult factory.
3. On 30 watt single output units, “+sense out” pin must be connected to “+Vout” pin; “-sense out” pin must be connected to “-Vout” pin. 15 Watt singles, pin 6 and 8 are omitted, internally connected
4. Line Regulation: Singles and duals: ±0.5% LL-HL
   Triples: ±1.0% LL-HL
5. Load Regulation: Singles: ±1% 1/4 Load to Full Load
   Duals: ±2% 1/4 Load to Full Load
   Dual 5Vout: ±3% 1/4 Load to Full Load
   Triples: ±5% 1/4 Load to Full Load
   15W triples require 20% min. load on main.
   30W duals / triples require 20% min. load on main.
6. PC pins: 0.04” diameter x 0.18” long (min.); typical eight places.
7. All DC/DC converters should be externally fused on the front end for protection.
8. Significant capacitive load may inhibit start-up and operation, consult factory.
9. Limited trim capability on 48VDC output modules, consult factory.

EFFICIENCY VS LOAD CURVE



DERATING CURVE