

# CALEX

## Power Conversion Solutions Short Form Product Guide



DC/DC Power Converters  
Brick/Chassis Mount Solutions - Digital/Analog  
AC/DC Power Supplies  
Custom Solutions  
Power Accessories







- *On-schedule Delivery*
- *100% Testing*
- *5 Year Warranty*
- *ISO 9001:2008 Certified*
- *Made in the USA*

Calex Mfg. Co., Inc has served the electronics industry for over 50 years and we offer a wide variety of DC/DC Converters for industrial and military applications as well as AC/DC Power Supplies as standard catalog products for fast delivery. Calex also specializes in custom solutions tailored to your specific requirement. Custom capabilities range from simple modifications to complete turn-key power systems. Our principal markets are the industrial, military, telecommunication and medical industries although our products are used in virtually every industry requiring voltage conversion in the 1 watt to 3 kilowatt range.

We have worked hard to balance our growth with a commitment to service. Calex provides you with some of the shortest lead times in the industry while also providing a top notch quality product backed by our unmatched five year warranty. Our manufacturing facility in Concord California is ISO9001:2008 Certified and uses the latest EDI, kanban and automated manufacturing technology to ensure a repeatable and cost effective solution for your power needs. Calex product performance is verified by an extensive in-house Design Validation Test procedure to ensure the product meets our published specification under all operating conditions.

- On-schedule delivery
- 100% Testing
- 5 year warranty

We have what you need. It's a matter of determining your specific requirements and coupling them with the product that will do the job right. With our standards and experience, you won't have to reinvent the wheel. Contact us today to provide a solution for your power needs quickly and cost effectively.

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# PRODUCT HIGHLIGHT

## BRICK SOLUTIONS 75 WATTS AND UP

### ANALOG SERIES

- 1/4 BRICK - 75 WATT QH SINGLE
- 1/4 BRICK - 150 WATT - QSW SINGLE
- 1/4 BRICK - 250 WATT - QMW SINGLE
- 1/2 BRICK - 100 WATT HEW SINGLE
- 1/2 BRICK - 150 WATT HEW SINGLE
- 1/2 BRICK - 200 WATT GX SINGLE
- 1/2 BRICK - 500 WATT - MXW SINGLE
- 1/2 BRICK - 75 WATT HD DUAL
- 1/2 BRICK - 75 WATT HE TRIPLE
- 1/2 BRICK - 75 WATT LT TRIPLE



SERIES	WATTS	PACKAGE	V in Nominal	V out	V in Range	Case Size
QH SINGLE	75	1/4 BRICK	24, 48	3.3, 5, 12, 15, 24	2:1	1.45" x 2.28" x 0.52"
QSW SINGLE	150	1/4 BRICK	24, 48	12, 24	4:1	1.53" x 2.38" x 0.52"
QMW SINGLE	250	1/4 BRICK	24, 48	12, 24	4:1	1.53" x 2.38" x 0.52"
HEW SINGLE	100	1/2 BRICK	24, 48	3.3, 5, 12, 15, 24	4:1	2.28" x 2.40" x 0.55"
HEW SINGLE	150	1/2 BRICK	24, 48	5, 12, 15, 24	4:1	2.28" x 2.40" x 0.55"
GX SINGLE	200	1/2 BRICK	28	15, 24	2:1	2.28" x 2.40" x 0.55"
MXW SINGLE	500	1/2 BRICK	24, 48	12, 24	4:1	2.4" x 2.5" x 0.52"
HD DUAL	75	1/2 BRICK	24, 48	2.5, 3.3, 5	2:1	2.28" x 2.40" x 0.55"
HE TRIPLE	75	1/2 BRICK	24, 48	3.3, 5, ±12, ±15, ±17	2:1	2.28" x 2.40" x 0.55"
LT TRIPLE	75	1/2 BRICK	24	1.5, 1.8, 2.5, 3.3, 5	2:1	2.28" x 2.40" x 0.55"

### DIGITAL SERIES

75 WATT , 1/8 BRICK WDE SERIES

- 4:1 INPUT, 1/8 BRICK PACKAGE
- BLACK BOX DIGITAL FAULT LOGGING
- DIGITALLY CONFIGURABLE VOLTAGE, CURRENT AND OVER TEMPERATURE
- REAL TIME PERFORMANCE DATA VIA PMbus™
- REMOTE SENSE, REMOTE ON/OFF



Watts	V in Nominal	V out	V in Range	I out	Case Size	Model Number
75	24	5	9.0 - 36.0	15A	2.5" x 1.1" x 0.55"	24S5.15WDE
75	24	12	9.0 - 36.0	6A	2.5" x 1.1" x 0.55"	24S12.6WDE
75	24	24	9.0 - 36.0	3A	2.5" x 1.1" x 0.55"	24S24.3WDE
75	24	28	9.0 - 36.0	2.5A	2.5" x 1.1" x 0.55"	24S28.3WDE
75	24	48	9.0 - 36.0	1.5A	2.5" x 1.1" x 0.55"	24S48.1WDE
75	48	24	18.0 - 75.0	3A	2.5" x 1.1" x 0.55"	48S24.3WDE
75	48	28	18.0 - 75.0	2.5A	2.5" x 1.1" x 0.55"	48S28.3WDE
75	48	48	18.0 - 75.0	1.5A	2.5" x 1.1" x 0.55"	48S48.1WDE

ALSO AVAILABLE - WDE EVALUATION BOARD

- CONTAINS DIGITAL ISOLATOR AND DIGITAL COMMUNICATION INDICATOR
- ALLOW EXTERNAL CONNECTION OF PMbus™
- GRAPHICAL USER INTERFACE
- ON BOARD INPUT PI FILTER
- TRANSIENT AND REVERSE VOLTAGE PROTECTION
- AUXILIARY POWER/INDICATORS



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# PRODUCT HIGHLIGHT

## CHASSIS MOUNT DC/DC CONVERTERS



### 1100 - 2100 WATT MBH SERIES

- DELIVERS UP TO 2100 WATTS
- EFFICIENCY UP TO 97%
- LOW PROFILE COMPACT 9.0"L X 6.5"W X 1.25" H PACKAGE
- ONLY 3.3LBS
- NO MINIMUM LOAD REQUIREMENT
- FIXED FREQUENCY OPERATION AT 400kHz
- FULLY PROTECTED (OTP, OCP, OVP, UVLO)
- AUTO RECOVERY
- INPUT REVERSE POLARITY PROTECTION
- HIGH RELIABILITY
- 5 YEAR WARRANTY

Watts	V in Nominal	V out	I out	Case Size	Model Number
1100	13	28	40A	9.0" x 6.5" x 1.25"	13S28.40MBH
1700	13	28	60A	9.0" x 6.5" x 1.25"	13S28.60MBH
2100	13	28	75A	9.0" x 6.5" x 1.25"	13S28.75MBH
1200	28	12	100A	9.0" x 6.5" x 1.25"	28S12.100MBH
1350	28	13.5	100A	9.0" x 6.5" x 1.25"	28S13.100MBH

40 WATT 2:1 NCM  
75 WATT 2:1 QCM  
150 WATT 4:1 HCM

ALSO AVAILABLE WITH DIN-MOUNT



SERIES	WATTS	V in Nominal	V out	V in Range	Case Size
NCM	40	12, 24, 48	3.3, 5, 12, 15	2:1	4.20" x 2.65" x 1.00"
QCM	75	24, 48	3.3, 5, 12, 15, 24	2:1	4.20" x 2.65" x 1.00"
HCM	150	24, 48	3.3, 5, 12, 15, 24	4:1	4.30" x 3.20" x 1.00"



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# CUSTOM APPLICATIONS

**5W TO 3kW**  
**APPLICATION SPECIFIC PACKAGING**  
**NON-STANDARD PARAMETERS**  
**UNIQUE FEATURES**  
**COTS & MIL-STD COMPLIANCE**



**LET US HELP YOU CREATE  
THE SOLUTION FOR YOUR APPLICATION**



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Calex offers a variety of DC/DC standard products with single, dual, and triple outputs in industry standard packages from 1 watt to 3 kilowatts. In order to expedite your product search, go to our website at [www.calex.com](http://www.calex.com) and take advantage of our on-line DC/DC parametric search. Should you not find the product you are looking for in our standard product offering, Calex does offer custom designs from simple modifications to complete turn-key power systems. We look forward to hearing from you.



## SINGLE OUTPUT SMT (SURFACE MOUNT) DC/DC CONVERTERS

### 1 to 5 Watts

Watts	V in Nominal	V out	V in Range	I out	Case Size	Model Number
1	5	5	4.5 - 5.5	200mA	0.31" x 0.50" x 0.26"	5S5.200SMT
1	5	9	4.5 - 5.5	110mA	0.31" x 0.50" x 0.26"	5S9.110SMT
1	5	12	4.5 - 5.5	84mA	0.31" x 0.50" x 0.26"	5S12.084SMT
1	5	15	4.5 - 5.5	67mA	0.31" x 0.50" x 0.26"	5S15.067SMT
1	12	5	10.8 - 13.2	200mA	0.31" x 0.50" x 0.26"	12S5.200SMT
1	12	9	10.8 - 13.2	110mA	0.31" x 0.50" x 0.26"	12S9.110SMT
1	12	12	10.8 - 13.2	84mA	0.31" x 0.50" x 0.26"	12S12.084SMT
1	12	15	10.8 - 13.2	67mA	0.31" x 0.50" x 0.26"	12S15.067SMT
3	12	3.3	9.0 - 18.0	700mA	0.58" x 1.27" x 0.40"	12S3R3.700SMT
3	12	5	9.0 - 18.0	600mA	0.58" x 1.27" x 0.40"	12S5.600SMT
3	12	12	9.0 - 18.0	250mA	0.58" x 1.27" x 0.40"	12S12.250SMT
3	12	15	9.0 - 18.0	200mA	0.58" x 1.27" x 0.40"	12S15.200SMT
3	24	3.3	18.0 - 36.0	700mA	0.58" x 1.27" x 0.40"	24S3R3.700SMT
3	24	5	18.0 - 36.0	600mA	0.58" x 1.27" x 0.40"	24S5.600SMT
3	24	12	18.0 - 36.0	250mA	0.58" x 1.27" x 0.40"	24S12.250SMT
3	24	15	18.0 - 36.0	200mA	0.58" x 1.27" x 0.40"	24S15.200SMT
3	48	3.3	36.0 - 75.0	700mA	0.58" x 1.27" x 0.40"	48S3R3.700SMT
3	48	5	36.0 - 75.0	600mA	0.58" x 1.27" x 0.40"	48S5.600SMT
3	48	12	36.0 - 75.0	250mA	0.58" x 1.27" x 0.40"	48S12.250SMT
3	48	15	36.0 - 75.0	200mA	0.58" x 1.27" x 0.40"	48S15.200SMT
5	12	3.3	9.0 - 18.0	1.2A	0.81" x 1.31" x 0.40"	12S3R3.1200SMT
5	12	5	9.0 - 18.0	1A	0.81" x 1.31" x 0.40"	12S5.1000SMT
5	12	12	9.0 - 18.0	417mA	0.81" x 1.31" x 0.40"	12S12.417SMT
5	12	15	9.0 - 18.0	333mA	0.81" x 1.31" x 0.40"	12S15.333SMT
5	24	3.3	18.0 - 36.0	1.2A	0.81" x 1.31" x 0.40"	24S3R3.1200SMT
5	24	5	18.0 - 36.0	1A	0.81" x 1.31" x 0.40"	24S5.1000SMT
5	24	12	18.0 - 36.0	417mA	0.81" x 1.31" x 0.40"	24S12.417SMT
5	24	15	18.0 - 36.0	333mA	0.81" x 1.31" x 0.40"	24S15.333SMT
5	48	3.3	36.0 - 75.0	1.2A	0.81" x 1.31" x 0.40"	48S3R3.1200SMT
5	48	5	36.0 - 75.0	1A	0.81" x 1.31" x 0.40"	48S5.1000SMT
5	48	12	36.0 - 75.0	417mA	0.81" x 1.31" x 0.40"	48S12.417SMT
5	48	15	36.0 - 75.0	333mA	0.81" x 1.31" x 0.40"	48S15.333SMT

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# SINGLE OUTPUT PCB MOUNT DC/DC CONVERTERS

## 1 to 10 Watts

Watts	V in Nominal	V out	V in Range	I out	Case Size	Model Number
1.8	12	1.5	9.0 - 18.0	1.2A	0.80" x 1.25" x 0.43"	12S1R5.1200HW
1.8	24	1.5	18.0 - 36.0	1.2A	0.80" x 1.25" x 0.43"	24S1R5.1200HW
1.8	48	1.5	36.0 - 72.0	1.2A	0.80" x 1.25" x 0.43"	48S1R5.1200HW
2.2	12	1.8	9.0 - 18.0	1.2A	0.80" x 1.25" x 0.43"	12S1R8.1200HW
2.2	24	1.8	18.0 - 36.0	1.2A	0.80" x 1.25" x 0.43"	24S1R8.1200HW
2.2	48	1.8	36.0 - 72.0	1.2A	0.80" x 1.25" x 0.43"	48S1R8.1200HW
3	5	48	4.6 - 6.5	65mA	0.80" x 1.25" x 0.43"	5S48.65CD
3	12	2.5	9.0 - 18.0	1.2A	0.80" x 1.25" x 0.43"	12S2R5.1200HW
3	12	3.3	9.0 - 18.0	600mA	0.80" x 1.25" x 0.28"	12S3R3.600LCS
3	12	5	9.0 - 18.0	600mA	0.80" x 1.25" x 0.28"	12S5.600LCS
3	12	12	9.0 - 18.0	250mA	0.80" x 1.25" x 0.28"	12S12.250LCS
3	12	15	9.0 - 18.0	200mA	0.80" x 1.25" x 0.28"	12S15.200LCS
3	24	2.5	18.0 - 36.0	1.2A	0.80" x 1.25" x 0.43"	24S2R5.1200HW
3	24	3.3	18.0 - 36.0	600mA	0.80" x 1.25" x 0.28"	24S3R3.600LCS
3	24	5	18.0 - 36.0	600mA	0.80" x 1.25" x 0.28"	24S5.600LCS
3	24	12	18.0 - 36.0	250mA	0.80" x 1.25" x 0.28"	24S12.250LCS
3	24	15	18.0 - 36.0	200mA	0.80" x 1.25" x 0.28"	24S15.200LCS
3	48	2.5	36.0 - 72.0	1.2A	0.80" x 1.25" x 0.43"	48S2R5.1200HW
3	48	3.3	36.0 - 72.0	600mA	0.80" x 1.25" x 0.28"	48S3R3.600LCS
3	48	5	36.0 - 72.0	600mA	0.80" x 1.25" x 0.28"	48S5.600LCS
3	48	12	36.0 - 72.0	250mA	0.80" x 1.25" x 0.28"	48S12.250LCS
3	48	15	36.0 - 72.0	200mA	0.80" x 1.25" x 0.28"	48S15.200LCS
4	12	3.3	9.0 - 18.0	1.2A	0.80" x 1.25" x 0.43"	12S3R3.1200HW
4	24	3.3	18.0 - 36.0	1.2A	0.80" x 1.25" x 0.43"	24S3R3.1200HW
4	48	3.3	36.0 - 72.0	1.2A	0.80" x 1.25" x 0.43"	48S3R3.1200HW
5	12	5	9.0 - 18.0	1A	0.8" x 1.25" x 0.43"	12S5.1000HW
5	12	12	9.0 - 18.0	425mA	0.8" x 1.25" x 0.43"	12S12.425HW
5	12	15	9.0 - 18.0	350mA	0.8" x 1.25" x 0.43"	12S15.350HW
5	24	5	18.0 - 36.0	1A	0.8" x 1.25" x 0.43"	24S5.1000HW
5	24	12	18.0 - 36.0	425mA	0.8" x 1.25" x 0.43"	24S12.425HW
5	24	15	18.0 - 36.0	350mA	0.8" x 1.25" x 0.43"	24S15.350HW
5	48	5	36.0 - 72.0	1A	0.8" x 1.25" x 0.43"	48S5.1000HW
5	48	12	36.0 - 72.0	425mA	0.8" x 1.25" x 0.43"	48S12.425HW
5	48	15	36.0 - 72.0	350mA	0.8" x 1.25" x 0.43"	48S15.350HW
6	5	3.3	3.5 - 16.0	2A	2.02" x 2.02" x 0.45"	5S3.2000LV
6	5	5	3.5 - 16.0	1.2A	1.00" x 2.00" x 0.45"	5S5.1200LV
6	5	5.2	3.5 - 16.0	1.2A	1.00" x 2.00" x 0.45"	5S5R2.1200LV
6	5	12	3.5 - 16.0	500mA	1.00" x 2.00" x 0.45"	5S12.500LV
6	5	15	3.5 - 16.0	400mA	1.00" x 2.00" x 0.45"	5S15.400LV
8	24	1.8	9.0 - 36.0	4.5A	1.02" x 2.02" x 0.43"	24S1R8.4500BR
8	48	1.8	18.0 - 72.0	4.5A	1.02" x 2.02" x 0.43"	48S1R8.4500BR
10	5	5	3.5 - 16.0	2A	2.02" x 2.02" x 0.45"	5S5.2000LV
10	12	3.3	9.0 - 18.0	3A	0.80" x 1.25" x 0.40"	12S3R3.3000EW
10	12	5	9.0 - 18.0	2A	0.80" x 1.25" x 0.40"	12S5.2000EW
10	12	12	9.0 - 18.0	833mA	0.80" x 1.25" x 0.40"	12S12.833EW
10	12	15	9.0 - 18.0	666mA	0.80" x 1.25" x 0.40"	12S15.666EW
10	24	2.5	18.0 - 36.0	3A	0.80" x 1.25" x 0.40"	24S2R5.3000EW
10	24	3.3	18.0 - 36.0	3A	0.80" x 1.25" x 0.40"	24S3R3.3000EW
10	24	5	18.0 - 36.0	2A	0.80" x 1.25" x 0.40"	24S5.2000EW
10	24	12	18.0 - 36.0	833mA	0.80" x 1.25" x 0.40"	24S12.833EW
10	24	15	18.0 - 36.0	666mA	0.80" x 1.25" x 0.40"	24S15.666EW
10	48	2.5	36.0 - 75.0	3A	0.80" x 1.25" x 0.40"	48S2R5.3000EW
10	48	3.3	36.0 - 75.0	3A	0.80" x 1.25" x 0.40"	48S3R3.3000EW
10	48	5	36.0 - 75.0	2A	0.80" x 1.25" x 0.40"	48S5.2000EW
10	48	12	36.0 - 75.0	833mA	0.80" x 1.25" x 0.40"	48S12.833EW
10	48	15	36.0 - 75.0	666mA	0.80" x 1.25" x 0.40"	48S15.666EW
11	24	2.5	9.0 - 36.0	4.5A	1.02" x 2.02" x 0.43"	24S2R5.4500BR

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# SINGLE OUTPUT PCB MOUNT DC/DC CONVERTERS

11 to 100 Watts

Watts	V in Nominal	V out	V in Range	I out	Case Size	Model Number
11	48	2.5	18.0 - 72.0	4.5A	1.02" x 2.02" x 0.43"	48S2R5.4500BR
12	5	12	3.5 - 16.0	1A	2.02" x 2.02" x 0.45"	5S12.1000LV
12	5	15	3.5 - 16.0	800mA	2.02" x 2.02" x 0.45"	5S15.800LV
15	24	3.3	9.0 - 36.0	4.5A	1.02" x 2.02" x 0.42"	24S3R3.4500BR
15	24	5	9.0 - 36.0	3A	1.02" x 2.02" x 0.42"	24S5.3000BR
15	24	12	9.0 - 36.0	1.25A	1.02" x 2.02" x 0.42"	24S12.1250BR
15	24	15	9.0 - 36.0	1A	1.02" x 2.02" x 0.42"	24S15.1000BR
15	48	3.3	18.0 - 72.0	4.5A	1.02" x 2.02" x 0.42"	48S3R3.4500BR
15	48	5	18.0 - 72.0	3A	1.02" x 2.02" x 0.42"	48S5.3000BR
15	48	12	18.0 - 72.0	1.25A	1.02" x 2.02" x 0.42"	48S12.1250BR
15	48	15	18.0 - 72.0	1A	1.02" x 2.02" x 0.42"	48S15.1000BR
30	24	5	18.0 - 36.0	6A	2.0" x 1.6" x 0.415"	24S5.6000MH
30	24	5	9.0 - 36.0	6A	2.0" x 1.6" x 0.415"	24S5.6000MHW
30	24	12	18.0 - 36.0	2.5A	2.0" x 1.6" x 0.415"	24S12.2500MH
30	24	12	9.0 - 36.0	2.5A	2.0" x 1.6" x 0.415"	24S12.2500MHW
30	24	15	18.0 - 36.0	2A	2.0" x 1.6" x 0.415"	24S15.2000MH
30	24	15	9.0 - 36.0	2A	2.0" x 1.6" x 0.415"	24S15.2000MHW
30	24	24	18.0 - 36.0	1.25A	2.0" x 1.6" x 0.415"	24S24.1250MH
30	24	24	9.0 - 36.0	1.25A	2.0" x 1.6" x 0.415"	24S24.1250MHW
30	48	5	36.0 - 75.0	6A	2.0" x 1.6" x 0.415"	48S5.6000MH
30	48	5	18.0 - 75.0	6A	2.0" x 1.6" x 0.415"	48S5.6000MHW
30	48	12	36.0 - 75.0	2.5A	2.0" x 1.6" x 0.415"	48S12.2500MH
30	48	12	18.0 - 75.0	2.5A	2.0" x 1.6" x 0.415"	48S12.2500MHW
30	48	15	36.0 - 75.0	2A	2.0" x 1.6" x 0.415"	48S15.2000MH
30	48	15	18.0 - 75.0	2A	2.0" x 1.6" x 0.415"	48S15.2000MHW
30	48	24	36.0 - 75.0	1.25A	2.0" x 1.6" x 0.415"	48S24.1250MH
30	48	24	18.0 - 75.0	1.25A	2.0" x 1.6" x 0.415"	48S24.1250MHW
60	24	3.3	18.0 - 36.0	20A	1.45" x 2.28" x 0.52"	24S3.20QH
75	24	24	18.0 - 36.0	3.13A	1.45" x 2.28" x 0.52"	24S24.3QH
75	24	5	18.0 - 36.0	15A	1.45" x 2.28" x 0.52"	24S5.15QH
75	24	5	9.0 - 36.0	15A	2.5" X 1.1" X 0.55"	24S5.15WDE
75	24	12	18.0 - 36.0	6.25A	1.45" x 2.28" x 0.52"	24S12.6QH
75	24	12	9.0 - 36.0	6A	2.5" X 1.1" X 0.55"	24S12.6WDE
75	24	15	18.0 - 36.0	5A	1.45" x 2.28" x 0.52"	24S15.5QH
75	24	24	9.0 - 36.0	3A	2.5" X 1.1" X 0.55"	24S24.3WDE
75	24	28	9.0 - 36.0	2.5A	2.5" X 1.1" X 0.55"	24S28.3WDE
75	24	48	9.0 - 36.0	1.5A	2.5" X 1.1" X 0.55"	24S48.1WDE
75	48	24	18.0 - 75.0	3A	2.5" X 1.1" X 0.55"	48S24.3WDE
75	48	24	36.0 - 75.0	3.13A	1.45" x 2.28" x 0.52"	48S24.3QH
75	48	28	18.0 - 75.0	2.5A	2.5" X 1.1" X 0.55"	48S28.3WDE
75	48	48	18.0 - 75.0	1.5A	2.5" X 1.1" X 0.55"	48S48.1WDE
82	24	3.3	9.0 - 36.0	25A	2.28" x 2.40" x 0.55"	24S3.25HEW
82	48	3.3	18.0 - 75.0	25A	2.28" x 2.40" x 0.55"	48S3.25HEW
99	24	3.3	9.0 - 36.0	30A	2.28" x 2.40" x 0.55"	24S3.30HEW
99	48	3.3	18.0 - 75.0	30A	2.28" x 2.40" x 0.55"	48S3.30HEW
100	24	5	9.0 - 36.0	20A	2.28" x 2.40" x 0.55"	24S5.20HEW
100	24	12	9.0 - 36.0	8.33A	2.28" x 2.40" x 0.55"	24S12.8HEW
100	24	15	9.0 - 36.0	6.67A	2.28" x 2.40" x 0.55"	24S15.7HEW
100	24	24	9.0 - 36.0	4.13A	2.28" x 2.40" x 0.55"	24S24.4HEW
100	48	5	18.0 - 75.0	20A	2.28" x 2.40" x 0.55"	48S5.20HEW
100	48	12	18.0 - 75.0	8.33A	2.28" x 2.40" x 0.55"	48S12.8HEW
100	48	15	18.0 - 75.0	6.67A	2.28" x 2.40" x 0.55"	48S15.7HEW
100	48	24	18.0 - 75.0	4.13A	2.28" x 2.40" x 0.55"	48S24.4HEW
150	24	5	9.0 - 36.0	30A	2.28" x 2.40" x 0.55"	24S5.30HEW
150	24	12	9.0 - 36.0	12.5A	2.28" x 2.40" x 0.55"	24S12.12HEW
150	24	15	9.0 - 36.0	10A	2.28" x 2.40" x 0.55"	24S15.10HEW
150	24	24	9.0 - 36.0	6.26A	2.28" x 2.40" x 0.55"	24S24.6HEW

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## SINGLE OUTPUT PCB MOUNT DC/DC CONVERTERS

150-500 Watts

Watts	V in Nominal	V out	V in Range	I out	Case Size	Model Number
150	48	5	18.0 - 75.0	30A	2.28" x 2.40" x 0.55"	48S5.30HEW
150	48	12	18.0 - 75.0	12.5A	2.28" x 2.40" x 0.55"	48S12.12HEW
150	48	15	18.0 - 75.0	10A	2.28" x 2.40" x 0.55"	48S15.10HEW
150	48	24	18.0 - 75.0	6.26A	2.28" x 2.40" x 0.55"	48S24.6HEW
150	24	12	9.0 - 36.0	12A	1.53" x 2.38" x 0.52"	24S12.12QSW
150	24	24	9.0 - 36.0	6A	1.53" x 2.38" x 0.52"	24S24.6QSW
150	48	12	18.0 - 75.0	12A	1.53" x 2.38" x 0.52"	48S12.12QSW
150	48	24	18.0 - 75.0	6A	1.53" x 2.38" x 0.52"	48S24.6QSW
200	28	15	16.0 - 40.0	13.33A	2.28" x 2.40" x 0.55"	28S15.13GX
200	28	24	16.0 - 40.0	8.33A	2.28" x 2.40" x 0.55"	28S24.8GX
250	24	12	9.0 - 36.0	20.5A	1.53" x 2.38" x 0.52"	24S12.20QMW
250	24	24	9.0 - 36.0	10.4A	1.53" x 2.38" x 0.52"	24S24.10QMW
250	48	12	18.0 - 75.0	20.5A	1.53" x 2.38" x 0.52"	48S12.20QMW
250	48	24	18.0 - 75.0	10.4A	1.53" x 2.38" x 0.52"	48S24.10QMW
500	24	12	9.0 - 36.0	41A	2.4" x 2.5" x 0.52"	24S12.41MXW
500	24	24	9.0 - 36.0	21A	2.4" x 2.5" x 0.52"	24S24.21MXW
500	48	12	18.0 - 75.0	41A	2.4" x 2.5" x 0.52"	48S12.41MXW
500	48	24	18.0 - 75.0	21A	2.4" x 2.5" x 0.52"	48S24.21MXW

## SINGLE OUTPUT CHASSIS MOUNT DC/DC CONVERTERS

40 to 150 Watts

Watts	V in Nominal	V out	V in Range	I out	Case Size	Model Number
40	12	3.3	9.0 - 18.0	8000mA	4.20" x 2.65" x 1.00"	12S3R3.8000NCM
40	12	5	9.0 - 18.0	8000mA	4.20" x 2.65" x 1.00"	12S5.8000NCM
40	12	12	9.0 - 18.0	3333mA	4.20" x 2.65" x 1.00"	12S12.3333NCM
40	12	15	9.0 - 18.0	2666mA	4.20" x 2.65" x 1.00"	12S15.2666NCM
40	24	3.3	18.0 - 36.0	8000mA	4.20" x 2.65" x 1.00"	24S3R3.8000NCM
40	24	5	18.0 - 36.0	8000mA	4.20" x 2.65" x 1.00"	24S5.8000NCM
40	24	12	18.0 - 36.0	3333mA	4.20" x 2.65" x 1.00"	24S12.3333NCM
40	24	15	18.0 - 36.0	2666mA	4.20" x 2.65" x 1.00"	24S15.2666NCM
40	48	3.3	36.0 - 75.0	8000mA	4.20" x 2.65" x 1.00"	48S3R3.8000NCM
40	48	5	36.0 - 75.0	8000mA	4.20" x 2.65" x 1.00"	48S5.8000NCM
40	48	12	36.0 - 75.0	3333mA	4.20" x 2.65" x 1.00"	48S12.3333NCM
40	48	15	36.0 - 75.0	2666mA	4.20" x 2.65" x 1.00"	48S15.2666NCM
75	24	3.3	18.0 - 36.0	20A	4.20" x 2.65" x 1.00"	24S3.20QCM
75	24	5	18.0 - 36.0	15A	4.20" x 2.65" x 1.00"	24S5.15QCM
75	24	12	18.0 - 36.0	6.25A	4.20" x 2.65" x 1.00"	24S12.6QCM
75	24	15	18.0 - 36.0	5A	4.20" x 2.65" x 1.00"	24S15.5QCM
75	24	24	18.0 - 36.0	3.13A	4.20" x 2.65" x 1.00"	24S24.3QCM
75	48	3.3	36.0 - 75.0	20A	4.20" x 2.65" x 1.00"	48S3.20QCM
75	48	5	36.0 - 75.0	15A	4.20" x 2.65" x 1.00"	48S5.15QCM
75	48	12	36.0 - 75.0	6.25A	4.20" x 2.65" x 1.00"	48S12.6QCM
75	48	15	36.0 - 75.0	5A	4.20" x 2.65" x 1.00"	48S15.5QCM
75	48	24	36.0 - 75.0	3.13A	4.20" x 2.65" x 1.00"	48S24.3QCM
99	24	3.3	9.0 - 36.0	30A	4.30" x 3.20" x 1.00"	24S3.30HCM
99	48	3.3	18.0 - 75.0	30A	4.30" x 3.20" x 1.00"	48S3.30HCM
150	24	5	9.0 - 36.0	30A	4.30" x 3.20" x 1.00"	24S5.30HCM
150	24	12	9.0 - 36.0	12.5A	4.30" x 3.20" x 1.00"	24S12.12HCM
150	24	15	9.0 - 36.0	10A	4.30" x 3.20" x 1.00"	24S15.10HCM
150	24	24	9.0 - 36.0	6.26A	4.30" x 3.20" x 1.00"	24S24.6HCM
150	48	5	18.0 - 75.0	30A	4.30" x 3.20" x 1.00"	48S5.30HCM
150	48	12	18.0 - 75.0	12.5A	4.30" x 3.20" x 1.00"	48S12.12HCM
150	48	15	18.0 - 75.0	10A	4.30" x 3.20" x 1.00"	48S15.10HCM
150	48	24	18.0 - 75.0	6.26A	4.30" x 3.20" x 1.00"	48S24.6HCM

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**SINGLE OUTPUT**  
1100 to 2100 Watts

**CHASSIS MOUNT DC/DC CONVERTERS**

Watts	V in Nominal	V out	V in Range	I out	Case Size	Model Number
1100	13	28	10.0 - 16.0	40A	9.0" x 6.5" x 1.25"	13S28.40MBH
1200	28	12	23.0 - 32.0	100A	9.0" x 6.5" x 1.25"	28S12.100MBH
1350	28	13.5	23.0 - 32.0	100A	9.0" x 6.5" x 1.25"	28S13.100MBH
1700	13	28	10.0 - 16.0	60A	9.0" x 6.5" x 1.25"	13S28.60MBH
2100	13	28	10.0 - 16.0	75A	9.0" x 6.5" x 1.25"	13S28.75MBH

**SINGLE OUTPUT**  
15 to 150 Watts

**DIN MOUNT DC/DC CONVERTERS**

Watts	V in Nominal	V out	V in Range	I out	Case Size	Model Number
15	12	24	9.0 - 18.0	625mA	1.37" x 3.35" x 2.27"	12S24.625DIN
40	12	3.3	9.0 - 18.0	8000mA	4.20" x 2.65" x 1.00"	12S3R3.8000NCM-DIN
40	12	5	9.0 - 18.0	8000mA	4.20" x 2.65" x 1.00"	12S5.8000NCM-DIN
40	12	12	9.0 - 18.0	3333mA	4.20" x 2.65" x 1.00"	12S12.3333NCM-DIN
40	12	15	9.0 - 18.0	2666mA	4.20" x 2.65" x 1.00"	12S15.2666NCM-DIN
40	24	3.3	18.0 - 36.0	8000mA	4.20" x 2.65" x 1.00"	24S3R3.8000NCM-DIN
40	24	5	18.0 - 36.0	8000mA	4.20" x 2.65" x 1.00"	24S5.8000NCM-DIN
40	24	12	18.0 - 36.0	3333mA	4.20" x 2.65" x 1.00"	24S12.3333NCM-DIN
40	24	15	18.0 - 36.0	2666mA	4.20" x 2.65" x 1.00"	24S15.2666NCM-DIN
40	48	3.3	36.0 - 75.0	8000mA	4.20" x 2.65" x 1.00"	48S3R3.8000NCM-DIN
40	48	5	36.0 - 75.0	8000mA	4.20" x 2.65" x 1.00"	48S5.8000NCM-DIN
40	48	12	36.0 - 75.0	3333mA	4.20" x 2.65" x 1.00"	48S12.3333NCM-DIN
40	48	15	36.0 - 75.0	2666mA	4.20" x 2.65" x 1.00"	48S15.2666NCM-DIN
75	24	3.3	18.0 - 36.0	20A	4.20" x 2.65" x 1.00"	24S3.20QCM-DIN
75	24	5	18.0 - 36.0	15A	4.20" x 2.65" x 1.00"	24S5.15QCM-DIN
75	24	12	18.0 - 36.0	6.25A	4.20" x 2.65" x 1.00"	24S12.6QCM-DIN
75	24	15	18.0 - 36.0	5A	4.20" x 2.65" x 1.00"	24S15.5QCM-DIN
75	24	24	18.0 - 36.0	3.13A	4.20" x 2.65" x 1.00"	24S24.3QCM-DIN
75	48	3.3	36.0 - 75.0	20A	4.20" x 2.65" x 1.00"	48S3.20QCM-DIN
75	48	5	36.0 - 75.0	15A	4.20" x 2.65" x 1.00"	48S5.15QCM-DIN
75	48	12	36.0 - 75.0	6.25A	4.20" x 2.65" x 1.00"	48S12.6QCM-DIN
75	48	15	36.0 - 75.0	5A	4.20" x 2.65" x 1.00"	48S15.5QCM-DIN
75	48	24	36.0 - 75.0	3.13A	4.20" x 2.65" x 1.00"	48S24.3QCM-DIN
99	24	3.3	9.0 - 36.0	30A	4.53" x 3.20" x 1.31"	24S3.30HCM-DIN
99	48	3.3	18.0 - 75.0	30A	4.53" x 3.20" x 1.31"	48S3.30HCM-DIN
150	24	5	9.0 - 36.0	30A	4.53" x 3.20" x 1.31"	24S5.30HCM-DIN
150	24	12	9.0 - 36.0	12.5A	4.53" x 3.20" x 1.31"	24S12.12HCM-DIN
150	24	15	9.0 - 36.0	10A	4.53" x 3.20" x 1.31"	24S15.10HCM-DIN
150	24	24	9.0 - 36.0	6.26A	4.53" x 3.20" x 1.31"	24S24.6HCM-DIN
150	48	5	18.0 - 75.0	30A	4.53" x 3.20" x 1.31"	48S5.30HCM-DIN
150	48	12	18.0 - 75.0	12.5A	4.53" x 3.20" x 1.31"	48S12.12HCM-DIN
150	48	15	18.0 - 75.0	10A	4.53" x 3.20" x 1.31"	48S15.10HCM-DIN
150	48	24	18.0 - 75.0	6.26A	4.53" x 3.20" x 1.31"	48S24.6HCM-DIN



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## DUAL OUTPUT

## SMT (SURFACE MOUNT) DC/DC CONVERTERS

### 1 to 5 Watts

Watts	V in Nominal	V out	V in Range	I out	Case Size	Model Number
1	5	±5	4.5 - 5.5	±100mA	0.31" x 0.60" x 0.26"	5D5.100SMT
1	5	±9	4.5 - 5.5	±55mA	0.31" x 0.60" x 0.26"	5D9.055SMT
1	5	±12	4.5 - 5.5	±42mA	0.31" x 0.60" x 0.26"	5D12.042SMT
1	5	±15	4.5 - 5.5	±33mA	0.31" x 0.60" x 0.26"	5D15.033SMT
1	12	±5	10.8 - 13.2	±100mA	0.31" x 0.60" x 0.26"	12D5.100SMT
1	12	±9	10.8 - 13.2	±55mA	0.31" x 0.60" x 0.26"	12D9.055SMT
1	12	±12	10.8 - 13.2	±42mA	0.31" x 0.60" x 0.26"	12D12.042SMT
1	12	±15	10.8 - 13.2	±33mA	0.31" x 0.60" x 0.26"	12D15.033SMT
3	12	±5	9.0 - 18.0	±300mA	1.27" x 0.74" x 0.40"	12D5.300SMT
3	12	±12	9.0 - 18.0	±125mA	1.27" x 0.74" x 0.40"	12D12.125SMT
3	12	±15	9.0 - 18.0	±100mA	1.27" x 0.74" x 0.40"	12D15.100SMT
3	24	±5	18.0 - 36.0	±300mA	1.27" x 0.74" x 0.40"	24D5.300SMT
3	24	±12	18.0 - 36.0	±125mA	1.27" x 0.74" x 0.40"	24D12.125SMT
3	24	±15	18.0 - 36.0	±100mA	1.27" x 0.74" x 0.40"	24D15.100SMT
3	48	±5	36.0 - 75.0	±300mA	1.27" x 0.74" x 0.40"	48D5.300SMT
3	48	±12	36.0 - 75.0	±125mA	1.27" x 0.74" x 0.40"	48D12.125SMT
3	48	±15	36.0 - 75.0	±100mA	1.27" x 0.74" x 0.40"	48D15.100SMT
4	28	±5	9.0 - 75.0	±300mA	1.22" x 0.80" x 0.28"	28D5.300AHW
4	28	±12	9.0 - 75.0	±125mA	1.22" x 0.80" x 0.28"	28D12.125AHW
4	28	±15	9.0 - 75.0	±100mA	1.22" x 0.80" x 0.28"	28D15.100AHW
5	12	±5	9.0 - 18.0	±500mA	0.81" x 1.31" x 0.40"	12D5.500SMT
5	12	±12	9.0 - 18.0	±208mA	0.81" x 1.31" x 0.40"	12D12.208SMT
5	12	±15	9.0 - 18.0	±167mA	0.81" x 1.31" x 0.40"	12D15.167SMT
5	24	±5	18.0 - 36.0	±500mA	0.81" x 1.31" x 0.40"	24D5.500SMT
5	24	±12	18.0 - 36.0	±208mA	0.81" x 1.31" x 0.40"	24D12.208SMT
5	24	±15	18.0 - 36.0	±167mA	0.81" x 1.31" x 0.40"	24D15.167SMT
5	48	±5	36.0 - 75.0	±500mA	0.81" x 1.31" x 0.40"	48D5.500SMT
5	48	±12	36.0 - 75.0	±208mA	0.81" x 1.31" x 0.40"	48D12.208SMT
5	48	±15	36.0 - 75.0	±167mA	0.81" x 1.31" x 0.40"	48D15.167SMT

## DUAL OUTPUT

## PCB MOUNT DC/DC CONVERTERS

### 5 to 75 Watts

Watts	V in Nominal	V out	V in Range	I out	Case Size	Model Number
5	24	±5	9.0 - 36.0	±500mA	0.80" x 1.25" x 0.43"	24D5.500HW
5	48	±5	18.0 - 75.0	±500mA	0.80" x 1.25" x 0.43"	48D5.500HW
6	24	±12	9.0 - 36.0	±250mA	0.80" x 1.25" x 0.43"	24D12.250HW
6	24	±15	9.0 - 36.0	±200mA	0.80" x 1.25" x 0.43"	24D15.200HW
6	48	±12	18.0 - 75.0	±250mA	0.80" x 1.25" x 0.43"	48D12.250HW
6	48	±15	18.0 - 75.0	±200mA	0.80" x 1.25" x 0.43"	48D15.200HW
10	5	±5	3.5 - 16.0	±1A	2.02" x 2.02" x 0.45"	5D5.100LV
10	12	±12	9.0 - 18.0	±416mA	0.80" x 1.25" x 0.40"	12D12.416EW
10	12	±15	9.0 - 18.0	±333mA	0.80" x 1.25" x 0.40"	12D15.333EW
10	24	±12	18.0 - 36.0	±416mA	0.80" x 1.25" x 0.40"	24D12.416EW
10	24	±15	18.0 - 36.0	333mA	0.80" x 1.25" x 0.40"	24D15.333EW
10	48	±12	36.0 - 75.0	±416mA	0.80" x 1.25" x 0.40"	48D12.416EW
10	48	±15	36.0 - 75.0	±333mA	0.80" x 1.25" x 0.40"	48D15.333EW
12	5	±12	3.5 - 16.0	±500mA	2.02" x 2.02" x 0.45"	5D12.500LV
12	5	±15	3.5 - 16.0	±400mA	2.02" x 2.02" x 0.45"	5D15.400LV
31	24	+5, +12	9.0 - 36.0	+3A, +1.3A	2.58" x 3.01" x 0.83"	24D5.12CS
31	48	+5, +12	20.0 - 72.0	+3A, +1.3A	2.58" x 3.01" x 0.83"	48D5.12CS
75	24	+3.3, 2.5	18.0 - 36.0	10A	2.3" x 2.4" x 0.55"	24D3.2R5HD
75	24	+5.0, +3.3	18.0 - 36.0	10A	2.3" x 2.4" x 0.55"	24D5.3R3HD

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# TRIPLE OUTPUT PCB MOUNT DC/DC CONVERTERS

## 20 to 75 Watts

Watts	V in Nominal	V out	V in Range	I out	Case Size	Model Number
20	12	5, $\pm 12$	9.0 - 18.0	2.5A, $\pm 310$ mA	2.02" x 2.02" x 0.45"	12T5.12HP
20	12	5, $\pm 15$	9.0 - 18.0	2.5A, $\pm 250$ mA	2.02" x 2.02" x 0.45"	12T5.15HP
20	24	5, $\pm 12$	18.0 - 36.0	2.5A, $\pm 310$ mA	2.02" x 2.02" x 0.45"	24T5.12HP
20	24	5, $\pm 15$	18.0 - 36.0	2.5A, $\pm 250$ mA	2.02" x 2.02" x 0.45"	24T5.15HP
20	48	5, $\pm 12$	36.0 - 72.0	2.5A, $\pm 310$ mA	2.02" x 2.02" x 0.45"	48T5.12HP
20	48	5, $\pm 15$	36.0 - 72.0	2.5A, $\pm 250$ mA	2.02" x 2.02" x 0.45"	48T5.15HP
75	24	3.3, $\pm 12$	18.0 - 36.0	20A, $\pm 2.0$ A	2.40" x 2.28" x 0.55"	24T3.12HE
75	24	3.3, $\pm 15$	18.0 - 36.0	20A, $\pm 2.0$ A	2.40" x 2.28" x 0.55"	24T3.15HE
75	24	5, $\pm 12$	18.0 - 36.0	15A, $\pm 2.0$ A	2.40" x 2.28" x 0.55"	24T5.12HE
75	24	5, $\pm 15$	18.0 - 36.0	15A, $\pm 2.0$ A	2.40" x 2.28" x 0.55"	24T5.15HE
75	24	3.3, 2.5, 1.5	18.0 - 36.0	10A EACH OUTPUT	2.40" x 2.28" x 0.55"	24T3.2.1R5LT
75	24	3.3, 2.5, 1.8	18.0 - 36.0	10A EACH OUTPUT	2.40" x 2.28" x 0.55"	24T3.2.1R8LT
75	24	5, 3.3, 2.5	18.0 - 36.0	10A EACH OUTPUT	2.40" x 2.28" x 0.55"	24T5.3.2LT
75	48	3.3, $\pm 12$	36.0 - 75.0	20A, $\pm 2.0$ A	2.40" x 2.28" x 0.55"	48T3.12HE
75	48	3.3, $\pm 15$	36.0 - 75.0	20A, $\pm 2.0$ A	2.40" x 2.28" x 0.55"	48T3.15HE
75	48	5, $\pm 12$	36.0 - 75.0	15A, $\pm 2.0$ A	2.40" x 2.28" x 0.55"	48T5.12HE
75	48	5, $\pm 15$	36.0 - 75.0	15A, $\pm 2.0$ A	2.40" x 2.28" x 0.55"	48T5.15HE
75	48	5, $\pm 16.8$	36.0 - 75.0	15A, $\pm 2.0$ A	2.40" x 2.28" x 0.55"	48T5.17HE



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CBAM™ stands for Calex Brick Assembly Module. The CBAM™ concept allows the system designer to choose the features needed for the application at hand. More specifically, the CBAM™ solution allows you to mix and match modular products to create your own unique power solution. This addresses a variety of issues including brown-out protection, EMI reduction, surge and spike protection, and provides clean uninterrupted power for your down stream circuitry. Calex can incorporate CBAM™ functionality into a variety of form factors to meet your unique requirements - simply contact the factory for details.

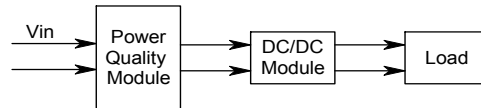
**Power Quality Module**

Features

- 1/2 brick Package (2.28" x 2.40" x 0.50")
- Designed to interface with MIL-STD-1275B

28VDC Power Bus

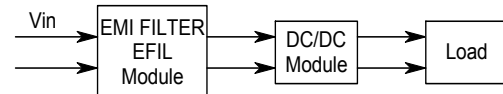
- Operates up to 100V
- Uninterrupted operation during transients
- All ceramic solution
- Excellent MTBF
- **Part number: PQ-28**



**EMI Filter Module**

Features

- Filter for systems with 24VDC and 28VDC nominal input voltage
- 1/2 brick package (2.28" x 2.40" x 0.50")
- Meets requirements of MIL-STD-461E at full load (200W @ 28V)
- All ceramic solution
- Excellent MTBF
- No need for external components under normal operation
- Optimized for Calex HEW DC/DC Converter Series
- **Part number: EFIL-28**



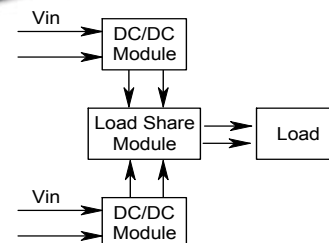
**Load Share Module**

Features

- 1/4 Brick Package (1.45" x 2.28" x 0.50")
- Dual input load sharing
- Maximum output current of 60A
- DC/DC converter trim function is maintained
- Excellent MTBF
- All ceramic solution

- **Part numbers:**

<b>3R3LSL30</b>	3.3V Input/Output
<b>5LSL30</b>	5V Input/Output
<b>12LSL12</b>	12V Input/Output
<b>15LSL10</b>	15V Input/Output
<b>24LSL6</b>	24V Input/Output
<b>48LSL6</b>	48V Input/Output



## AC/DC POWER SUPPLIES

### Features

- Low Noise
- Stable Output Voltage
- Tightly Regulated
- Five Year Warranty

Calex offers a variety of linear power supplies from 1 to 10 Watts with single, dual and triple output configurations in PCB Mount and Chassis Mount packages. All models are available as RoHS compliant, add "(RoHS)" after the model number when ordering.

## SPECIFICATIONS

### AC/DC LINEAR POWER SUPPLIES

Common Specification	
Input Voltage	115 ±10 VAC
Input Frequency Range	50 to 60 Hz
Input to Output Isolation	1000 - 2500 VRMS, depending on model
Input to Output Resistance	50 Megohms minimum
Capacitance	50 - 250 pF, depending on model
Overvoltage Protection	Standard on all 5 Volt singles except model 21-30
Temperature Coefficient	±0.01%/°C typical
Storage Temperature	-25°C to +85°C
Case Operating Temperature with no Derating	-25°C to +50°C
Short Circuit Protection	Foldback current limiting on all except models 21-12, 21-30 and 22-40, which have constant current limiting
Mounting Kits	Available for the PC board mountable cases

Case Size	
Case	Case Dimensions
A	3.0" x 2.0" x 1.0" (76.2mm x 50.8mm x 25.4mm) Terminals are 0.040" (1.016mm) diameter x 0.25" (6.35mm) length
B1	3.5" x 2.5" x 0.875" (88.9mm x 63.5mm x 22.2mm) Terminals are 0.040" (1.016mm) diameter x 0.25" (6.35mm) length
B2	3.5" x 2.5" x 1.25" (88.9mm x 63.5mm x 31.8mm) Terminals are 0.040" (1.016mm) diameter x 0.25" (6.35mm) length
B3	3.5" x 2.5" x 1.56" (88.9mm x 63.5mm x 39.6mm) Terminals are 0.040" (1.016mm) diameter x 0.25" (6.35mm) length
C	2.26" x 1.75" x 1.00" (57.1mm x 44.5mm x 25.4mm) Terminals are 0.040" (1.016mm) diameter x 0.25" (6.35mm) length
CM	4.0" x 2.7" x 1.4" (101.6mm x 68.58mm x 35.6mm) Terminals are #6 screws - 0.137" (3.48mm) in diameter in a 0.33" (8.38mm) wide barrier strip

Visit us on the Web for Complete Datasheets at [www.calex.com](http://www.calex.com)



## CHASSIS MOUNT CASES

## AC/DC LINEAR POWER SUPPLIES

Output Voltage VDC	Output Current mA	Line & Load Regulation	Noise & Ripple mV RMS	Case Size	Model Number
<b>Single Output</b>					
5	500	±0.10%	1	CM	CM1.5.500-115
5	1000	±0.010%	1	CM	CM1.5.1000-115
10	400	±0.010%	1	CM	CM1.10.400-115
12	500	±0.010%	1	CM	CM1.12.500-115
15	400	±0.010%	1	CM	CM1.15.400-115
24	240	±0.04%	1	CM	CM1.24.240-115
<b>Dual Output</b>					
±12	±120	±0.04%	1	CM	CM2.12.120-115
±12	±240	±0.04%	1	CM	CM2.12.240-115
±15	±100	±0.04%	1	CM	CM2.15.100-115
±15	±200	±0.04%	1	CM	CM2.15.200-115
<b>Triple Output</b>					
±12 & 5	±100 & 600	±0.10%	2	CM	CM3.12.5-115
±15 & 5	±100 & 500	±0.10%	2	CM	CM3.15.5-115

## PC Board Mounting Cases

## AC/DC Linear Power Supplies

Output Voltage VDC	Output Current mA	Line & Load Regulation	Noise & Ripple mV RMS	Case Size	Model Number
<b>Single Output</b>					
5	300	±0.20%	2	■ C	21-30-115
5	500	±0.10%	1	B1	1.5.500-115
5	1000	±0.10%	1	B2	1.5.1000-115
5	2000	±0.20%	2	B3	1.5.2000-115
12	120	±0.20%	2	■ C	21-12-115
12	480	±0.04%	2	B2	1.12.480-115
12	750	±0.04%	2	B3	1.12.750-115
15	400	±0.04%	2	B2	1.15.400-115
15	600	±0.04%	2	B3	1.15.600-115

■ C case size units for 50Hz operation derate output current 50%.

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## PC Board Mounting Cases **AC/DC Linear Power Supplies**

Output Voltage VDC	Output Current mA	Line & Load Regulation	Noise & Ripple mV RMS	Case Size	Model Number
<b>Dual Output</b>					
±5	±750	±0.10%	1	B3	2.5.750-115
±12	±240	±0.04%	1	B2	2.12.240-115
±15	±50	±0.04%	1	B1	2.15.50-115
±15	±50	±0.20%	2	■ C	22-40-115
±15	±100	±0.04%	1	B1	2.15.100-115
±15	±200	±0.04%	1	B2	2.15.200-115
**±15	±200	±0.04%	1	B2	2.15.200DV-115
±15	±350	±0.04%	2	B3	2.15.350-115
<b>Triple Output</b>					
*±12 & 5	±100 & 600	±0.10%	2	B2	3.12.5-115
±15 & 5	±100 & 500	±0.10%	2	B2	3.15.5-115
±12 & 5	±125 & 1000	±0.20%	2	B3	3.12.1000-115
±15 & 5	±100 & 1000	±0.20%	2	B3	3.15.1000-115

\* The +5V output load regulation in the 3.12.5-115 is ±0.2%

\*\* Dual AC Input 115/230VAC

■ C case size units for 50Hz operation derate output current 50%.



Visit us on the Web for Complete Datasheets at [www.calex.com](http://www.calex.com)

### Mounting Kits

Calex offers a variety of mounting kits for our pcb mounted modular DC/DC Converters and Power Supplies. The mounting kits provide a convenient “plug and play” solution with a prefabricated pcb with screw terminal connections and through holes for mounting with stand-offs. These kits are ideal for panel mount or quick turn applications where spinning a pcb is not an option. All mounting kits are available as RoHS compliant, simply add a “(RoHS)” after the model number when ordering. For a comprehensive list of all the mounting kits available for Calex power products reference [www.calex.com](http://www.calex.com) or contact the factory for your specific solutions.



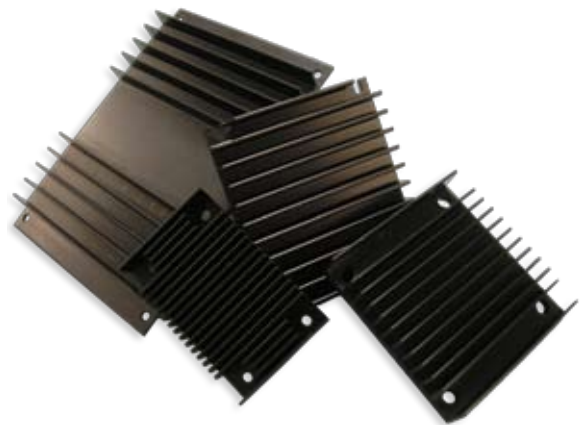
### Filter Modules

Calex offers several filter modules for everything from differential and common mode filters to modules that meet the requirements of MIL-STD-461E. All filters are available as RoHS compliant, simply add “(RoHS)” after the model number when ordering. See the Calex web site for specific model numbers and specifications.



### Heatsinks

Calex offers a variety of heatsinks for use with Calex power products in extended temperature applications. Heatsinks may be purchased on a stand-alone basis or mounted on a module depending on your preference. For a comprehensive list of all the heatsinks available from Calex reference [www.calex.com](http://www.calex.com) and go to the Power Accessories summary on the site.





# DC/DC Converter Specification Worksheet

Name: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone / Fax: \_\_\_\_\_ Email: \_\_\_\_\_  
 Project Name: \_\_\_\_\_ Estimated Quantity Needed / Year: \_\_\_\_\_  
 Prototype Needs / Date: \_\_\_\_\_ Production Needs / Date: \_\_\_\_\_  
 Target Price: \_\_\_\_\_ Website: \_\_\_\_\_

## TARGET DESIGN SPECIFICATIONS

Input Voltage Range - NOM: \_\_\_\_\_ MIN: \_\_\_\_\_ MAX: \_\_\_\_\_ VDC

Filtered Input? YES NO Desired Input Reflected Ripple: \_\_\_\_\_ mA P-P

Switching Frequency: \_\_\_\_\_ (CALEX's choice is to optimize for minimum noise / maximum efficiency)

Efficiency: \_\_\_\_\_ (see above)

Output(s):

#1 Voltage: \_\_\_\_\_ Initial Accuracy: \_\_\_\_\_ Noise: \_\_\_\_\_ mV P-P

Rated Load Range - MIN: \_\_\_\_\_ MAX: \_\_\_\_\_ mA

Load Regulation: \_\_\_\_\_ % Line Regulation: \_\_\_\_\_ %

#2 Voltage: \_\_\_\_\_ Initial Accuracy: \_\_\_\_\_ Noise: \_\_\_\_\_ mV P-P

Rated Load Range - MIN: \_\_\_\_\_ MAX: \_\_\_\_\_ mA

Load Regulation: \_\_\_\_\_ % Line Regulation: \_\_\_\_\_ %

#3 Voltage: \_\_\_\_\_ Initial Accuracy: \_\_\_\_\_ Noise: \_\_\_\_\_ mV P-P

Rated Load Range - MIN: \_\_\_\_\_ MAX: \_\_\_\_\_ mA

Load Regulation: \_\_\_\_\_ % Line Regulation: \_\_\_\_\_ %

Isolation? YES NO Isolation Voltage: \_\_\_\_\_ VAC or VDC

On/Off Control? YES NO Trim? YES NO How Much? \_\_\_\_\_ % Remote Sense? YES NO

Case Operating Temperature Range - MIN: \_\_\_\_\_ MAX: \_\_\_\_\_ °C

Ambient Operating Temperature Range - MIN: \_\_\_\_\_ MAX: \_\_\_\_\_ °C

Desired Case Size - W: \_\_\_\_\_ L: \_\_\_\_\_ H: \_\_\_\_\_ Inches

Mounting: Pin SMT Din Rail Mounting Kit

Agency Requirement? UL CE TUV Other: \_\_\_\_\_

MIL-STD Requirement on your system? \_\_\_\_\_

Special Shipping Package Requirements? \_\_\_\_\_

Other Considerations/Additional Outputs: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_





Calex is an ISO 9001:2008 Certified Company



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8/2014

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