

Product Catalog

March 2009

Selection Table of Isolated Brick Converter

Package	Series	Vin (V)	Output Power (W)	Output Voltage**	Page
1/16 Brick	SRS4	36 - 75	45, 60, 90	1.0V, 1.2V, 1.5V, 1.8V, 2.0V, 2.5V, 3.3V, 5V, 12V, 15V	4
	SRS2	18 - 36	45, 60, 90	1.0V, 1.2V, 1.5V, 1.8V, 2.0V, 2.5V, 3.3V, 5V, 12V, 15V	5
	SBU4	36 - 60	100, 150	Fixed Ratio: 4:1, 5:1	13
1/8 Brick	ERS4	36 - 75	60, 84, 120	1.0V, 1.2V, 1.5V, 1.8V, 2.0V, 2.5V, 3.3V, 5V, 12V, 15V	5-6
	ERS3	18 - 60/75	48, 72, 116	3.3V, 5V, 8V, 12V	6
	ERS2	18 - 36	85, 125	3.3V, 5V, 8V, 12V	7
	EBU4	36 - 60	200, 300	Fixed Ratio: 4:1, 5:1	13
	EBC4	36 - 75	240	5V, 6.5V, 9.6V, 12V (5% regulation)	14
1/4 Brick	QRS4*	36 - 75	85, 125	1.0V, 1.2V, 1.5V, 1.8V, 2.0V, 2.5V, 3.3V, 5V, 12V	7-8
	QRS2*	18 - 36	85, 125		
	QPS4	36 - 75	204	1.0V, 1.2V, 1.5V, 1.8V, 2.0V, 2.5V, 3.3V, 5V, 12V	9
	QBU4		300, 450	Fixed Ratio: 4:1, 5:1, 7:1	13
	QBC4	36 - 75	396	5V, 6.5V, 9.6V, 12V (5% regulation)	14
1/3 Brick	TRS4	36 - 75	105, 156, 224, 308	3.3V, 5V, 12V, 15V, 28V	9-10
	TRS2	18 - 36	105, 156, 224, 308	3.3V, 5V, 12V, 15V, 28V	10-11
1/2 Brick	HRS4*	36 - 75	120, 204	1.0V, 1.2V, 1.5V, 1.8V, 2.0V, 2.5V, 3.3V, 5V, 12V	11
	HPS4	36 - 75	360	0.8V, 1.0V, 1.2V, 1.5V, 1.8V, 2.0V, 2.5V, 3.3V, 5V, 12V, 15V	12

*: active current share option available.

**: without special notice, the output trim up range is 10% and trim down range is 20%.

Selection Table of Non-Isolated POL Converters

Package*	Series	Vin (V)	Io_max (A)	Size (in)	Page
SMT	NBS	2.5-5.5, 8.5-16, 9-36, 18-36	8	1.10 x 0.45 x 0.25	16
SMT	NAS	2.5-5.5, 8.5-18, 9-36, 18-36	20	1.30 x 0.53 x 0.25	15
SIP	NAT	2.5-5.5, 8.5-18, 9-36, 18-36	20	2.00 x 0.50 x 0.25	15
SMT	NES	8.5-18	30	1.30 x 0.53 x 0.38	17
SIP	NET	8.5-18	30	2.00 x 0.50 x 0.38	17
SIP	NCT	8-16	40	2.00 x 0.68 x 0.25	16

*: all packages are DOSA standard compatible.

Isolated DC-DC Converter Bricks

SRS	4	033	N	025	N	2	5
Series Name:	Nominal Input Voltage:	Nominal Output Voltage:	Enabling Logic:	Rated Output Current:	Pin Length:	Electrical Options:	Mechanical Options
Example: SRS – sixteenth brick	4: 48V 3: 36V 2: 24V 1: 12V	Example: 033 = 3.3V 120 = 12.0V	P: Positive N: Negative	Example: 060 = 60A 007 = 7A	K: 0.110" L: Dual "K" Pin N: 0.145" O: Dual "N" Pin R: 0.180" T: Dual "R" Pin S: SMT Pin	0: None 1: Current Sharing 2: Auto Restart 3: Both	0: Open Frame (Leaded) 5: Open Frame (ROHS) 1: Baseplate (Leaded) 6: Baseplate (ROHS) 3: Baseplate with Case Pin (Leaded) 8: Baseplate with Case Pin (ROHS)

Not all options are available on all series. Check the datasheets for available options.

Enabling Logic

P: Positive = On/Off control pin must be pulled up or left open to turn on converter

N: Negative = On/Off control pin must be pulled down to turn on converter

Pin Length in inches

Dual output pins are available on select high output current bricks.

Electrical Options

Current Sharing: Converter is set up to equalize current among bricks in parallel.

Auto Restart: Converter will automatically restart after a shutdown condition has passed.

Mechanical Options

Baseplate = Thermally conductive metal plate coupled to power processing components for better thermal performance, and can be used to attach a heatsink.

Baseplate with Case Pin = An option pin on some bricks to allow the baseplate to be connected to the system where the customers prefer.

Fully Regulated Bricks

SRS4 (36V - 75V input) Sixteenth Brick Series



15A/45W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
15	3	45	92%	SRS4150x003xxx
12	3	36	92%	SRS4120x003xxx
5.0	8	40	91%	SRS4050x008xxx
3.3	10	33	91%	SRS4033x010xxx
2.5	15	38	90%	SRS4025x015xxx
1.8	15	27	88%	SRS4018x015xxx
1.5	15	23	86%	SRS4015x015xxx
1.2	15	18	85%	SRS4012x015xxx
1.0	15	15	84%	SRS4010x015xxx

25A/60W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
15	4	60	92%	SRS4150x004xxx
12	5	60	92%	SRS4120x005xxx
5.0	12	60	91%	SRS4050x012xxx
3.3	18	59	91%	SRS4033x018xxx
2.5	20	50	90%	SRS4025x020xxx
1.8	25	45	88%	SRS4018x025xxx
1.5	25	38	86%	SRS4015x025xxx
1.2	25	30	85%	SRS4012x025xxx
1.0	25	25	84%	SRS4010x025xxx

35A/90W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
15	6	90	92%	SRS4150x006xxx
12	7.5	90	92%	SRS4120x008xxx
5.0	17	85	91.5%	SRS4050x017xxx
3.3	25	83	91.5%	SRS4033x025xxx
2.5	30	75	90.5%	SRS4025x030xxx
1.8	30	54	88.5%	SRS4018x030xxx
1.5	30	45	86.5%	SRS4015x030xxx
1.2	35	42	85%	SRS4012x035xxx
1.0	35	35	84%	SRS4010x035xxx

SRS2 (18V - 36V input) Sixteenth Brick Series

45W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
15	3	45	92%	SRS2150x003xxx
12	3	36	92%	SRS2120x003xxx
5.0	8	40	91%	SRS2050x008xxx
3.3	10	33	91%	SRS2033x010xxx

60W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
15	4	60	92%	SRS2150x004xxx
12	5	60	92%	SRS2120x005xxx
5.0	12	60	91%	SRS2050x012xxx
3.3	18	59	91%	SRS2033x018xxx

75W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
15	5	75	92%	SRS2150x005xxx
12	6	72	92%	SRS2120x006xxx
5.0	15	75	91%	SRS2050x015xxx
3.3	22	73	91%	SRS2033x022xxx

ERS4 (36V- 75V input) Eighth Brick Series



20A/60W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
12	5	60	93%	ERS4120x005xxx
5.0	10	50	92%	ERS4050x010xxx
3.3	15	50	91%	ERS4033x015xxx
2.5	20	50	90%	ERS4025x020xxx
1.8	20	36	88%	ERS4018x020xxx
1.5	20	30	86%	ERS4015x020xxx
1.2	20	24	85%	ERS4012x020xxx
1.0	20	20	83%	ERS4010x020xxx

30A/84W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
15	5	75	93%	ERS4150x005xxx
12	7	84	93%	ERS4120x007xxx
5.0	15	75	92%	ERS4050x015xxx
3.3	20	66	91%	ERS4033x020xxx
2.5	25	63	90%	ERS4025x025xxx
1.8	30	54	88%	ERS4018x030xxx
1.5	30	45	86%	ERS4015x030xxx
1.2	30	36	85%	ERS4012x030xxx
1.0	30	30	83%	ERS4010x030xxx

40A/120W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
12	10	120	93%	ERS4120x010xxx
5.0	20	100	92%	ERS4050x020xxx
3.3	30	99	91%	ERS4033x030xxx
2.5	35	88	90%	ERS4025x035xxx
1.8	40	72	88%	ERS4018x040xxx
1.5	40	60	86%	ERS4015x040xxx
1.2	40	48	85%	ERS4012x040xxx
1.0	40	40	83%	ERS4010x040xxx

ERS3 (18V – 60/75V input) Eighth Brick Series

- Add suffix "W" for 18-75V input
- Use numbers in () for 18-75V input

48W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
12	4	48	91% (90%)	ERS3120x004xxx(W)
8	6	48	90% (89%)	ERS3080x006xxx(W)
5	9	45	90% (89%)	ERS3050x009xxx(W)
3.3	14	46	89% (88%)	ERS3033x014xxx(W)

72W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
12	6	72	92% (91%)	ERS3120x006xxx(W)
8	9	72	91.5% (90.5%)	ERS3080x009xxx(W)
5	14	70	91.5% (90.5%)	ERS3050x014xxx(W)
3.3	20	66	90% (89%)	ERS3033x020xxx(W)

116W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
12	9	108	92% (91%)	ERS3120x009xxx(W)
8	12	96	91.5% (90.5%)	ERS3080x012xxx(W)
5	20	100	91.5% (90.5%)	ERS3050x020xxx(W)
3.3	35 (30)	116 (99)	90% (89%)	ERS3033x035xxx ERS3033x030xxxW

ERS2 (18V – 36V input) Eighth Brick Series

60W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
12	5	60	92%	ERS2120x005xxx
8	7	56	91.5%	ERS2080x007xxx
5	10	50	91%	ERS2050x010xxx
3.3	15	50	90%	ERS2033x015xxx

85W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
12	7	84	93%	ERS2120x007xxx
8	10	80	92%	ERS2080x010xxx
5	17	85	92%	ERS2050x017xxx
3.3	25	82.5	91%	ERS2033x020xxx

125W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
12	10	120	93%	ERS2120x010xxx
8	15	120	92%	ERS2080x015xxx
5	25	125	92%	ERS2050x025xxx
3.3	35	115	91%	ERS2033x035xxx



QRS4 (36V – 75V Input) Quarter Brick Series

25A/85W Converters: current sharing is available

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
12	7	84	93%	QRS4120x007xxx
5.0	17	85	92%	QRS4050x017xxx
3.3	25	83	91%	QRS4033x025xxx
2.5	25	63	90%	QRS4025x025xxx

Note: for new designs, recommend to consider ERS or SRS series

40A/125W Converters: current sharing is available.

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
12	10	120	93%	QRS4120x010xxx
5.0	25	125	92%	QRS4050x025xxx
3.3	35	116	91%	QRS4033x035xxx
2.5	35	88	90%	QRS4025x035xxx
1.8	40	72	88%	QRS4018x040xxx
1.5	40	60	86%	QRS4015x040xxx

Note: for new designs, recommend to consider ERS or SRS series

QRS2 (18V – 36V Input) Quarter Brick Series

25A/85W Converters: Current sharing is available.

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
12	7	84	92%	QRS2120x007xxx
5.0	17	85	91%	QRS2050x017xxx
3.3	25	83	90%	QRS2033x025xxx
3.3	20	66	90%	QRS2033x020xxx
2.5	25	63	89%	QRS2025x025xxx
1.8	25	45	87%	QRS2018x025xxx
1.5	25	38	86%	QRS2015x025xxx
1.2	25	30	84%	QRS2012x025xxx

40A/125W Converters: Current sharing is available.

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
12	10	120	92%	QRS2120x010xxx
5.0	25	125	91%	QRS2050x025xxx
3.3	35	116	90%	QRS2033x035xxx
2.5	35	88	89%	QRS2025x035xxx
1.8	40	72	86%	QRS2018x040xxx
1.5	40	60	85%	QRS2015x040xxx
1.2	40	48	84%	QRS2012x040xxx
1.0	40	40	82%	QRS2010x040xxx

QPS4 (36V – 75V Input) Quarter Brick Series



100A/204W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
15	13	195	94%	QPS4150x013xxx
12	17	204	94%	QPS4120x017xxx
5.0	40	200	93%	QPS4050x040xxx
3.3	55	182	93%	QPS4033x055xxx
2.5	60	150	92%	QPS4025x060xxx
1.8	65	117	89%	QPS4018x065xxx
1.5	100	150	89%	QPS4015x100xxx
1.5	65	98	88%	QPS4015x065xxx
1.2	100	120	87.5%	QPS4012x100xxx
1.2	70	84	87%	QPS4012x070xxx
1.0	70	70	85%	QPS4010x070xxx
0.8	70	56	84%	QPS4008x070xxx

TRS4 (36V – 75V Input) Third Brick Series
 - half brick pin-out, smaller footprint



30A/105W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
15	7	105W	93.5%	TRS4150x007xxx
12	8	100W	93.5%	TRS4120x008xxx
5	20	100W	92.5%	TRS4050x020xxx
3.3	30	100W	92%	TRS4033x030xxx

45A/156W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
28	5	140W	93%	TRS4280x005xxx
15	10	150W	93.5%	TRS4150x010xxx
12	13	156W	93%	TRS4120x013xxx
5	30	150W	92.5%	TRS4050x030xxx
3.3	45	150W	92%	TRS4033x045xxx

60A/224W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
28	8	224W	93%	TRS4280x008xxx
15	14	210W	93%	TRS4150x014xxx
12	17	204W	93%	TRS4120x017xxx
5	40	200W	92.5%	TRS4050x040xxx
3.3	60	200W	92%	TRS4033x060xxx

308W Converter:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
28	11	308W	92%	TRS4280x011xxx

TRS2 (18V – 36V Input) Third Brick Series
 – half brick pin-out, smaller footprint

30A/105W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
15	7	105W	91.5%	TRS2150x007xxx
12	8	100W	91.5%	TRS2120x008xxx
5	20	100W	92%	TRS2050x020xxx
3.3	30	100W	91%	TRS2033x030xxx

45A/156W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
28	5	140W	92%	TRS2280x005xxx
15	10	150W	91.5%	TRS2150x010xxx
12	13	156W	91%	TRS2120x013xxx
5	30	150W	91.5%	TRS2050x030xxx
3.3	45	150W	90.5%	TRS2033x045xxx

60A/224W Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
28	8	224	91.5%	TRS2280x008xxx
15	14	210	91%	TRS2150x014xxx
12	17	204	91%	TRS2120x017xxx
5	40	200	91%	TRS2050x040xxx
3.3	60	200	90%	TRS2033x060xxx

308W Converter:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
28	11	308	90.5%	TRS2280x011xxx



HRS4 (36V – 75V Input) Half Brick Series

40A/132W Converters: Current sharing is available.

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
12	11	132	93%	HRS4120x011xxx
5.0	25	125	92%	HRS4050x025xxx
3.3	40	132	92%	HRS4033x040xxx
2.5	40	100	91%	HRS4025x040xxx
1.8	40	72	88%	HRS4018x040xxx
1.5	40	60	87%	HRS4015x040xxx
1.2	40	48	85%	HRS4012x040xxx

Note: for new designs, recommend to use ERS, QRS, TRS series

70A/204W Converters: Current sharing is available.

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
12	17	204	93%	HRS4120x017xxx
5.0	40	200	92%	HRS4050x040xxx
3.3	60	198	91%	HRS4033x060xxx
2.5	65	163	90%	HRS4025x065xxx
1.8	65	117	87%	HRS4018x065xxx
1.5	70	105	86%	HRS4015x070xxx
1.2	70	84	84%	HRS4012x070xxx
1.0	70	70	82%	HRS4010x070xxx

Note: for new designs, also consider QPS, TRS series

HPS4 (36V – 75V input) Half Brick Series

100A/360W Half Brick Converters:

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
15	20	300	94%	HPS4150x020xxx
12	30	360	94%	HPS4120x030xxx
12	25	300	94%	HPS4120x025xxx
5.0	55	275	93%	HPS4050x055xxx
3.3	80	264	91.5%	HPS4033x080xxx
2.5	85	213	91%	HPS4025x085xxx
1.8	90	162	88%	HPS4018x090xxx
1.5	95	143	87%	HPS4015x095xxx
1.2	100	120	86%	HPS4012x100xxx
1.0	100	100	84%	HPS4010x100xxx
0.8	100	80	83%	HPS4008x100xxx

Note: for new designs, also consider QPS and TRS series

Intermediate Bus Converters (IBC)

Sixteenth, Eighth and Quarter Brick Packages

SBU4 (36V - 60V Input) Fixed-Ratio Sixteenth Brick Bus Converter Series



Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
12	8	100	95.5%	SBU4004x100xxx
12	13	150	95%	SBU4004x150xxx
9.6	10	100	95.5%	SBU4005x100xxx
9.6	16	150	95%	SBU4005x150xxx

EBU4 (36V - 60V Input) Fixed-Ratio Eighth Brick Bus Converter Series



Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
12	16	200	96%	EBU4004x200xxx
12	25	300	96%	EBU4004x300xxx
9.6	21	200	96%	EBU4005x200xxx
9.6	32	300	96%	EBU4005x300xxx

QBU4 (36V - 60V Input) Fixed-Ratio Quarter Brick Bus Converter Series



Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
12	25	300	96%	QBU4004x300xxx
12	38	450	96%	QBU4004x450xxx
9.6	32	300	96%	QBU4005x300xxx
9.6	47	450	96%	QBU4005x450xxx
6.8	52	350	95%	QBU4007x350xxx

EBC4 (36V – 75V Input) Eighth Brick Series (Vo regulation 5%)

Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
12	22	264	95%	EBC4120x022xxx
12	17	204	95%	EBC4120x017xxx
9.6	25	240	94.5%	EBC4096x025xxx
9.6	20	192	94.5%	EBC4096x020xxx
5	42	210	94%	EBC4050x042xxx
5	35	175	94%	EBC4050x035xxx

QBC4 (36V – 75V Input) Quarter Brick Series (Vo regulation 5%)



Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Model
12	33	396	96%	QBC4120x033xxx
12	28	336	96%	QBC4120x028xxx
9.6	40	384	95%	QBC4096x040xxx
9.6	33	317	95%	QBC4096x033xxx
6.5	53	345	94%	QBC4065x053xxx
6.5	45	293	94%	QBC4065x045xxx
5	70	350	94%	QBC4050x070xxx
5	58	290	94%	QBC4050x058xxx

Non-Isolated DC-DC Converters

NAS/NAT – DOSA Compatible POL Converters

NAS	0	000	N	20	R	1	5
Series Name	Input Voltage Range:	Nominal Output Voltage*:	Enabling Logic**:	Rated Output Current:	Pin Length:	Electrical Options:	Mechanical Options
NAT: SIP NAS: SMT	0: 2.5 – 5.5V 1: 8.5 – 18V 2: 9.0 – 36V 3: 18 – 36V	Example: 000 = Variable	P: Positive N: Negative	Example: 20 = 20A	R: 0.180" (NAT) S: SMT (NAS)	0: None 1: Voltage Tracking 2: OVP 3: Both VT&OVP 4: Synchronization*** 5: Both Sync&OVP	0: Open Frame (Pb) 1: Baseplate (Pb) 5: Open Frame (ROHS) 6: Baseplate (ROHS)

*: Standard codes are with variable output voltage and require a trim resistor on the customer board to program the output voltage. Fixed output voltage codes are available as semi-custom codes for qualified opportunities.

**: NAS/NAT converters are enabled when On/Off pin is left open independent from the enabling logic.

***: Synchronization feature is only available for NAT series.



Model	Input Voltage	Output Voltage	Output Current	Output Power	Efficiency**	Package
NAT0000x12Rxx	2.5 – 5.5V	0.75 – 3.63V	12A	43W	94%	SIP
NAT0000x20Rxx	2.5 – 5.5V	0.75 – 3.63V	20A	73W	96%	SIP
NAS0000x12Sxx	2.5 – 5.5V	0.75 – 3.63V	12A	43W	94%	SMT
NAS0000x20Sxx	2.5 – 5.5V	0.75 – 3.63V	20A	73W	96%	SMT
NAT1000x12Rxx	8.5 – 18V	0.75 – 5.5V*	12A	66W	92%	SIP
NAT1000x20Rxx	8.5 – 18V	0.75 – 5.5V*	20A	110W	91%	SIP
NAS1000x12Sxx	8.5 – 18V	0.75 – 5.5V*	12A	66W	92%	SMT
NAS1000x20Sxx	8.5 – 18V	0.75 – 5.5V*	20A	110W	91%	SMT
NAT2000x10Rxx	9.0 – 36V	3 – 6V	10A	45W	88%	SIP
NAS2000x10Sxx	9.0 – 36V	3 – 6V	10A	45W	88%	SMT
NAT3000x09Rxx	18 – 36V	5 – 15.5V	9A	60W	94%	SIP
NAS3000x09Sxx	18 – 36V	5 – 15.5V	9A	60W	94%	SMT

*: output voltage above 5.5V (up to 8V) is available as semi-custom products.

**: Efficiency is measured at full load under the operating conditions specified in the datasheet.



NBS - DOSA Compatible POL Converters

NBS	0	000	N	08	S	1	5
Series Name	Input Voltage Range:	Nominal Output Voltage:	Enabling Logic:	Rated Output Current:	Pin Length:	Electrical Options:	Mechanical Options
NBS: SMT	0: 2.5 – 5.5V 1: 8.5 – 18V 2: 9.0 – 36V 3: 18 – 36V	Example: 000 = Variable	P: Positive N: Negative	Example: 08 = 8A	S: SMT	0: None 1: Voltage Tracking	0: Open Frame (Pb) 5: Open Frame (ROHS)

*: NBS converters are enabled when On/Off pin is left open in either P or N enabling logic.

Model	Input Voltage (V)	Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Package
NBS0000x08Sxx	2.5 – 5.5	0.75 – 3.63	8		92%	SMT
NBS1000x08Sxx	8.5 - 16	3 – 5.5	8		91%	SMT
NBS2000x04Sxx	9 - 36	3 – 6	3.5	18	86%	SMT
NBS3000x04Sxx	18 - 36	5 – 15.5	3.5	24	94%	SMT



NCT - DOSA Compatible POL Converters

NCT	1	000	N	040	R	2	5	0
Series Name:	Nominal Input Voltage:	Nominal Output Voltage:	Enabling Logic*:	Rated Output Current:	Pin Length:	Electrical Option 1:	Mechanical Options	Electrical Option 2:
NCT	0: 4.5 - 5.5V 1: 8 – 16V	Example: 000 = Variable	P: Positive N: Negative	040 = 40A	H: Horizontal (0.18") R: Vertical (0.13") T: Vertical (0.17") S: SMT	0: None 1: Output Tracking 2: Output Droop 3: Tracking & Droop	Lead-free, ROHS Compliant 0: Open Frame (Leaded) 1: Baseplate (Leaded) 5: Open Frame (ROHS Compliant) 6: Baseplate (ROHS Compliant)	0: None 1: Freq Synch 2: Power Good 3: Sense

*: NCT converters are enabled when On/Off pin is left open independent from the enabling logic.

Model	Input Voltage (V)	Output Voltage (V)	Output Current (A)	Output Power (W)	Efficiency	Package
NCT0000x040xxxx	4.5 – 5.5	0.75 – 3.63	40	175	97%	SIP
NCT1000x040xxxx	8 - 16	3 – 5.5	40	175	95%	SIP



NES/NET – DOSA Compatible POL Converters

NET	0	000	N	20	R	1	5
Series Name	Input Voltage Range:	Nominal Output Voltage:	Enabling Logic*:	Rated Output Current:	Pin Length:	Electrical Options:	Mechanical Options
NET: SIP NES: SMT	0: 2.5 – 5.5V 1: 8.5 – 18V 2: 9.0 – 36V 3: 18 – 36V	Example: 000 = Variable	P: Positive N: Negative	Example: 30 = 30A	R: 0.180" (NET) S: SMT (NES)	0: None 1: Voltage Tracking 2: OVP 3: Both VT&OVP	0: Open Frame (Pb) 1: Baseplate (Pb) 5: Open Frame (ROHS) 6: Baseplate (ROHS)

*: NES/NET converters are enabled when On/Off pin is left open independent from the enabling logic.

Model	Input Voltage (V)	Output Voltage (V)*	Output Current (A)	Output Power (W)	Efficiency	Package
NET1000x16Rxx	8.5 – 18	0.75 – 5.5	16A	88W	96%	SIP
NET1000x30Rxx	8.5 – 18	0.75 – 5.5	30A	125W	96%	SIP
NES1000x16Sxx	8.5 – 18	0.75 – 5.5	16A	88W	96%	SMT
NES1000x30Sxx	8.5 – 18	0.75 – 5.5	30A	125W	96%	SMT

*output voltage above 5.5V (up to 8V) is available as semi-custom products.