

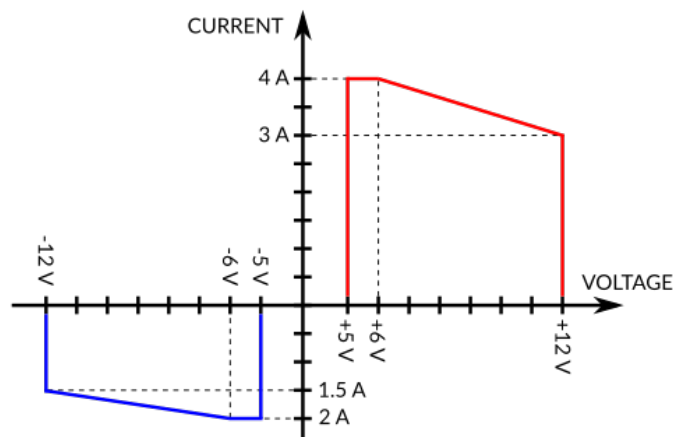
Koheron SPS200 is a 36 W dual power supply with two output voltages settable from +/-5 V to +/-12 V. It operates from a single 18 V to 33 V input supply. Integrated input and output EMI filters ensure low levels of ripple and radiated emissions. Thanks to its high output power, many modules can be supplied from a single SPS200.

Specifications

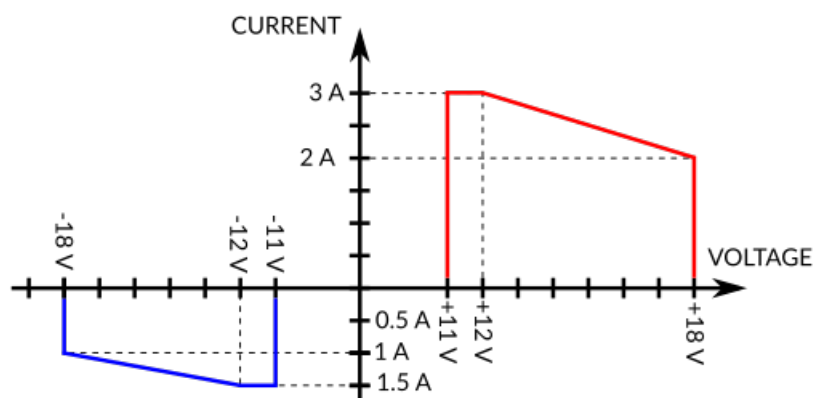
	SPS200-PN	SPS200-PN-HV	SPS200-PP
Positive output(s)			
Output voltage range	5 V to 12.5 V	11 V to 18.5 V	5 V to 12.5 V
Maximum output current	4 A (+5 V to +6 V)	3 A (+11 V to +12 V)	4 A (+5 V to +6 V)
Maximum output current	3 A (at 12 V)	2 A (at 18 V)	3 A (at 12 V)
Efficiency 24 V input	95 % (12 V, 3 A)	95 % (15 V, 2 A)	95 % (12 V, 3 A)
Ripple and noise 10 Hz to 5 MHz bandwidth	1.4 mV _{rms} (12 V, 3 A)	1.8 mV _{rms} (15 V, 1.5 A)	1.4 mV _{rms} (12 V, 3 A)
Start up time	50 ms	50 ms	50 ms
Load regulation	≤ 3 % (5 V out.)	≤ 1 % (11 V out.)	≤ 3 % (5 V out.)
Negative output			
Output voltage range	-5 V to -12.5 V	-11 V to -18.5 V	
Maximum output current	2 A (-5 V to -6 V)	1.5 A (-11 V to -12 V)	
Maximum output current	1.5 A (-12 V)	1 A (-18 V)	
Efficiency 24 V input	87 % (-12 V, 1.5 A)	90 % (-15 V, 1 A)	
Ripple and noise 10 Hz to 5 MHz bandwidth	0.8 mV _{rms} (-12 V, 1.44 A)	1.4 mV _{rms} (-15 V, 1 A)	
Start up time	250 ms	300 ms	
Load regulation	≤ 2 % (-5 V out.)	≤ 1.5 % (-11 V out.)	
Input power supply			
Input voltage	18 V to 33 V, nom. 24 V	21 V to 33 V, nom. 24 V	18 V to 33 V, nom. 24 V
Input supply connector	Jack (2.1 & 2.5 mm) or terminal block	Jack (2.1 & 2.5 mm) or terminal block	Jack (2.1 & 2.5 mm) or terminal block
Input current limit	3.3 A	3.3 A	3.3 A

Input current no load $V_{in} = 24\text{ V}$, $\pm 12\text{ V}$ output	3 mA	4 mA	3 mA
Surge voltage 1 s max.	$\leq 50\text{ V}$	$\leq 50\text{ V}$	$\leq 50\text{ V}$
Overvoltage lock-out	typ. 36 V	typ. 36 V	typ. 36 V
Other			
Maximum output power	36 W	36 W	48 W
Outside dimensions	79 mm x 50 mm x 15 mm	79 mm x 50 mm x 15 mm	79 mm x 50 mm x 15 mm
Weight	36 g	36 g	36 g
Operating temperature	0 °C to 50 °C	0 °C to 50 °C	0 °C to 50 °C
Temperature coefficient	75 ppm/°C	75 ppm/°C	75 ppm/°C

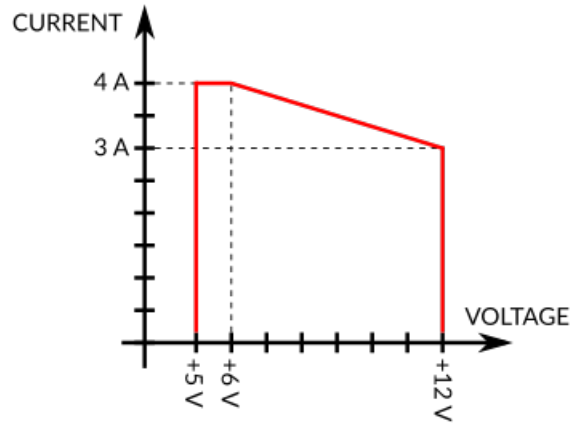
Operating limits



SPS200-PN (5 V to 12.5 V) operating limits

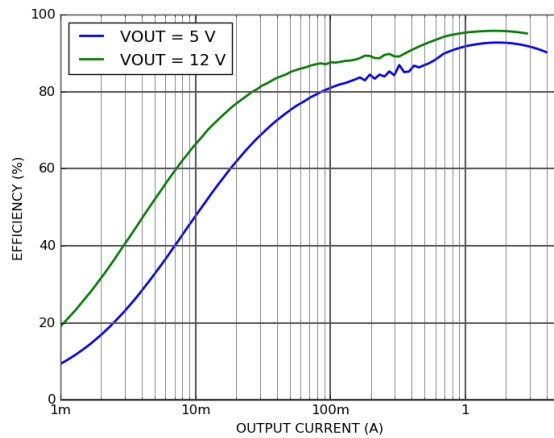


SPS200-PN-HV (11 V to 18.5 V) operating limits

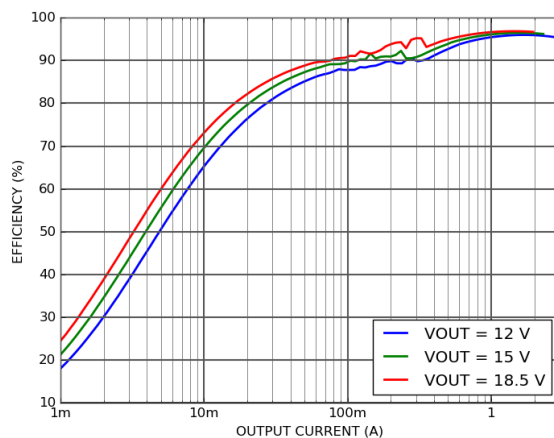


SPS200-PP (5 V to 12.5 V) operating limits

Positive output efficiency ($V_{in} = 24\text{ V}$)

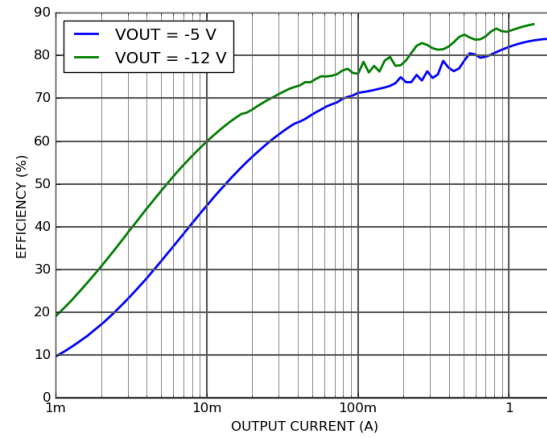


SPS200-PN (5 V to 12.5 V) positive converter efficiency

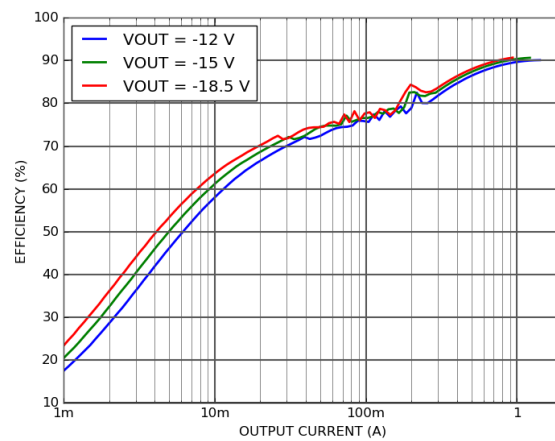


SPS200-PN-HV (11 V to 18.5 V) positive converter efficiency

Negative output efficiency ($V_{in} = 24\text{ V}$)



SPS200-PN (5 V to 12.5 V) negative converter efficiency



SPS200-PN-HV (11 V to 18.5 V) negative converter efficiency

Ordering codes

PRODUCT NUMBER	ATTRIBUTE
SPS200-PN	Outputs Positive / Negative
SPS200-PN-HV	Outputs Positive / Negative / High voltage
SPS200-PP	Outputs Positive / Positive
SPS200-PN-SHLD	Outputs Positive / Negative / Mounted shield
SPS200-PN-HV-SHLD	Outputs Positive / Negative / High voltage / Mounted shield
SPS200-PP-SHLD	Outputs Positive / Positive / Mounted shield