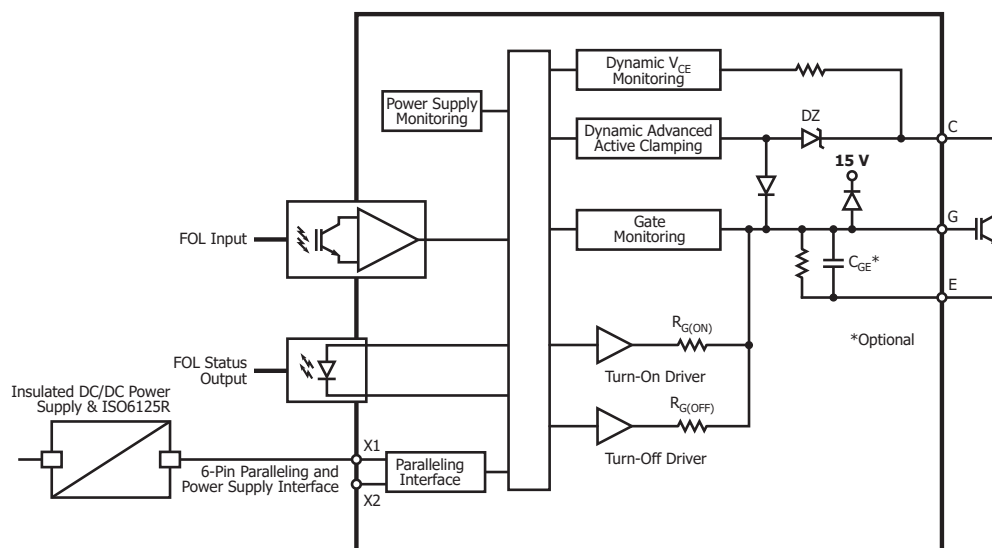


# SCALE™ -2 Plug-and-Play IGBT Gate Driver 1SP0630

- Compact, single-channel gate driver solution
- For easy paralleling of power modules up to 3300 V blocking voltage
- 30 A peak output gate current
- 1.6 W output power at maximum operating temperature
- Optimized for 130 x 140 mm single-channel IGBT high-power modules

## Single-Channel Plug-and-Play Gate Driver for Blocking Voltages up to 3300 V



PI-9504a-040722

Note: 1SP0630V can operate 1SP0635D for paralleling

## Applications

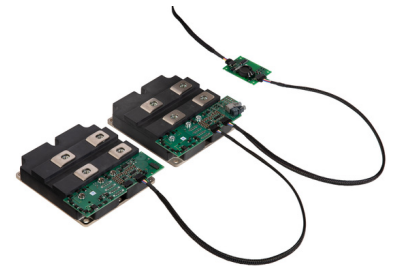
- Railway inverters
- Industrial drives
- Other industrial applications

## Product Details

Parameter	Min	Typical	Max	Unit
Nominal supply voltage	23.5	25	30	V
Supply current 1SP0630x2Mx @ $f_{IN} = 0$ Hz		44		mA
Per additional 1SP0635D2Sx @ $f_{IN} = 0$ Hz		35		mA
Supply current, full load 1SP0630x2Mx		118		mA
Output power (1SP0630V2Mx or 1SP0630SMx)			1.6	W
Output power (1SP0635D2Sx)		2.6		W
Gate voltage		+15/-10		V
Peak output current (gate current)	-30		+30	A
Switching frequency ( $f_s^{-1}$ )	0		10	kHz
Duty cycle	0		100	%
Creepage distance primary-secondary <sup>2</sup>	21			mm
Clearance distance primary-secondary <sup>2</sup>	21			mm
Dielectric test voltage <sup>2</sup>	6000			$V_{RMS}$
Partial discharge extinction voltage <sup>2</sup>	3630			$V_{PEAK}$
Operating temperature	-40		+85	°C

1 Maximum switching frequency depends on the IGBT gate charge. See data sheet for actual value of specific driver.

2 Provided by external DC/DC ISO6125R-33



Full assembly:  
1SP0630V + 1SP0635D + ISO6125

## Design Support

Available Products      1SP0630 products list ([www.power.com/1SP0630](http://www.power.com/1SP0630))