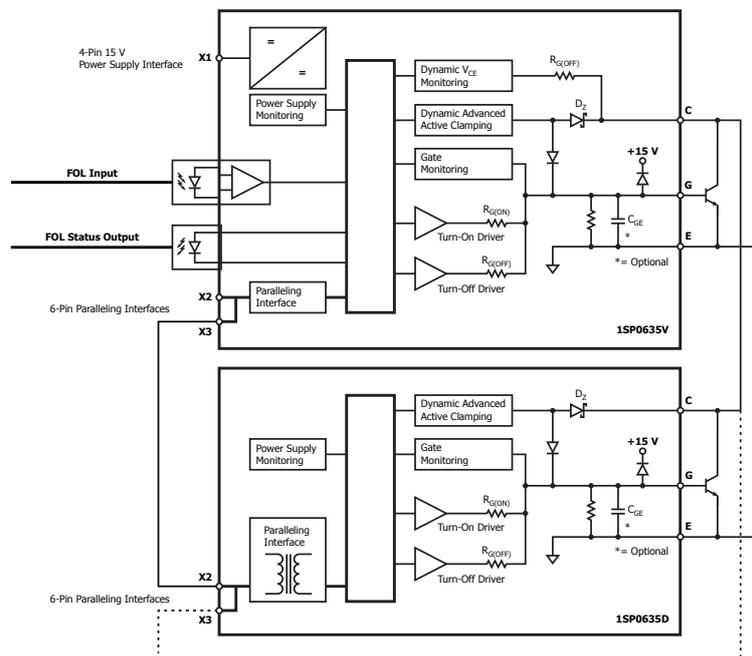


# SCALE™ -2 Plug-and-Play IGBT Gate Driver 1SP0635

- Direct paralleling of up to four IGBT modules
- Supports two-level and multi-level topologies
- Fiberoptic interfaces
- IGBT short-circuit protection
- Overvoltage protection by Dynamic Advanced Active Clamping
- Built-in isolated DC-DC converter

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



## Applications

- Railway main inverters
- Railroad power supplies
- High-voltage DC transmission systems
- Flexible AC transmission systems
- Medium-voltage drives
- Industrial motor drives

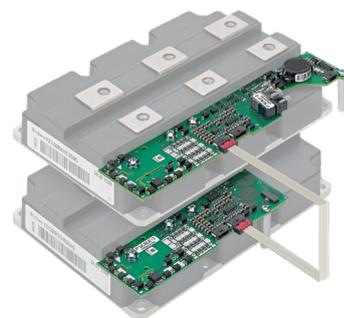
## Certifications

- Creepage and clearance according to IEC 60077-1
- UL compliant

## Product Details

Parameter	Min	Typical	Max	Unit
Nominal supply voltage		15		V
Supply current 1SP0635x2Mx @ $f_{IN} = 0$ Hz		120		mA
Per additional 1SP0635D2Sx @ $f_{IN} = 0$ Hz		35		mA
Supply current, full load 1SP0635x2Mx			400	mA
Output power (1SP0635V2Mx or 1SP0635SMx)			3	W
Output power (1SP0635D2Sx)			2.6	W
Gate voltage		+15 / -10		V
Peak output current (gate current)	-35		+35	A
Switching frequency ( $f_s^{-1}$ )	0		30	kHz
Duty cycle	0		100	%
Creepage distance primary-secondary	21			mm
Clearance distance primary-secondary	21			mm
Dielectric test voltage (3.3 kV versions)	6000			$V_{RMS}$
Partial discharge extinction voltage (3.3 kV versions)	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.



## Design Support

Available Products      1SP0635 products list ([www.power.com/1SP0635](http://www.power.com/1SP0635))