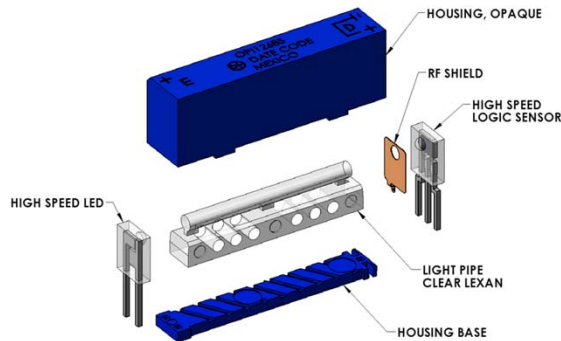


OPI1268S “SUPER BLUE” OPTOISOLATOR

Introducing TT electronics Optoelectronics Business Unit (OPTEK Technology)
OPI1268S “Super Blue” Optoisolator

Optoelectronics Business Unit
OPI1268S “Super Blue Isolator”

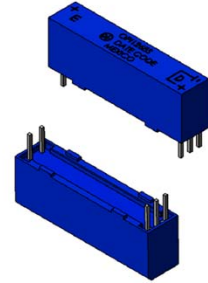
- 20 KV Isolation
- 30KV/ μ s dv/dt Voltage Spike Noise Immunity
- 50°C to 100°C Operation
- Flexibility of use for Engineer



Protect Patient & User

Robotic Interfaces

Protect Operator & Control Circuits from High Voltage



- Industry Certifications:**
- UL / CSA (USA/Canada) ✓
 - Vde (European) ✓
 - ATEX / IECx (Non-Ignition Source)
 - IP65 (Dust & Water Proof) ✓

Optical Isolators are used to separate low voltage control circuits from high voltage “work” circuits. OPTEK’s OPI1268S Super Blue Isolator offers 20KV isolation, 30KV/ μ s Voltage Spike Immunity, and has the broadest cross continent industry certifications of any manufacturer.

OPI1268S “Super Isolator” Operation

The IRLED shines IR light via light waveguide onto the sensor. The photologic sensor detects the light and switches its digital output logic low or logic high dependent on whether light is present on the sensor’s active area.

Isolation is derived from the physical separation between the LED & Photologic discrettes

The operation basics of optoisolators

What makes the OPI1268S “Super”

- Multiple Cross Continent Industry Certifications
- Incorporation of Customer Feedback to keep product at the highest standards now & in the future
- Universal Product – One part does all
- Allows engineer flexible one part usage for multiple high voltage isolating Control Circuits from High Voltage Systems - simplifies supply chain
- 20KV Isolation Capable over greater temperature range
- 100% Temperature Tested

TT electronics' Optoelectronic Business Unit developed the OPI1268S listening to the “Voice of the Customer”. As a result, the OPI1268S is a truly “Universal” optoelectronic isolator giving engineers one part usage for a variety of isolation applications.

OPI1268S Certifications

Industry Certifications:

- UL / CSA (USA/Canada)
- Vde (European)
- ATEX / IECx (Non-Ignition Source)
- IP65 Rated (Dust & Water Proof Level)

Internal Certifications:

- dv/dt (30KV Voltage Spike Immunity)
- 6 axis / 10G load rating (Robustness)
- 50 C to +100 C (Operating Temp)
- 20KV Isolation Voltage



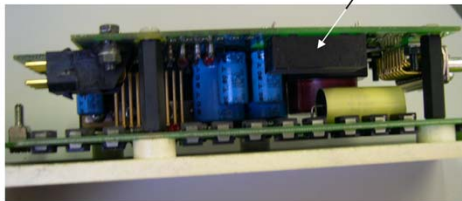
Industry certifications include UL/CSA and Vde with ATEX/IECx certification pending. The OPI1268S is water and dust proof to an IP65 rating. No other manufacturer carries all of these certifications. The Optoelectronics Business Unit conducts internal certifications for voltage spike immunity, robustness, operating temperature and isolation to insure the highest quality and performance.

Cross Reference

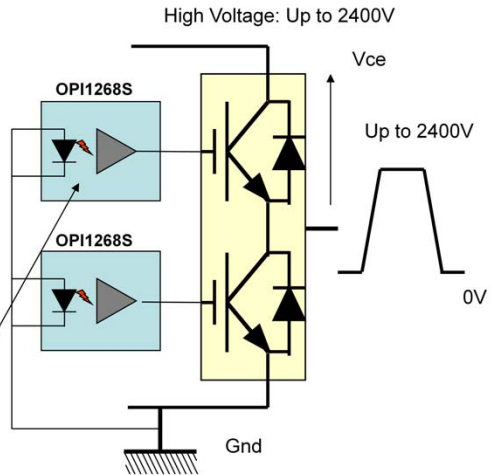
		Isolation (KV)	Operation Temp (°C)		dv/dt KV/us	Certifications			
			min	max		UL/CSA	Vde	ATEX	IP65
Optek	OPI1268S	20	-50	100	30	X	X	X	X
Bedford Opto	OPI2000M	10	-25	100		X		X	
Micropac	66320	15	-40	100		X			
Fairchild	Dip pkg	5	-40	100	35	X			
Avago	Dip pkg	7.5	-40	105	20	X			
Toshiba	Dip pkg	5	-40	100	10	X	X		

Our competitors. Note that OPTEK offers the highest isolation, broadest temperature range and most certifications.

Application



The optoisolator protects not only the control circuits from the high voltage systems but for PERSONAL SAFETY to the end user as well



The upper gate drive must have high voltage spike noise immunity(dv/dt) keeping any common mode transient from switching the photologic to opposite digital state

An optoisolator is used in any application that requires isolation between a low voltage control circuit and a high voltage work circuit.

OPI1268S “Super Isolator” in Bullet Trains



The OPI1268S is used to switch the IGBTs(Insulated-gate Bipolar Transistor) “On” and “Off” in the high speed braking systems of bullet trains.

Opto-isolators separate low voltage data from high voltage systems within the train via circuit coupling

IGBTs are high efficiency and fast switching power transistors used to switch electrical power through different systems.

An example of an OPI1268S application.