

OP5360 - 32 Digital Output - 5-15V or 5-30V

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The OP5360 module features 32 isolated push-pull digital output channels.

It comes in two options:

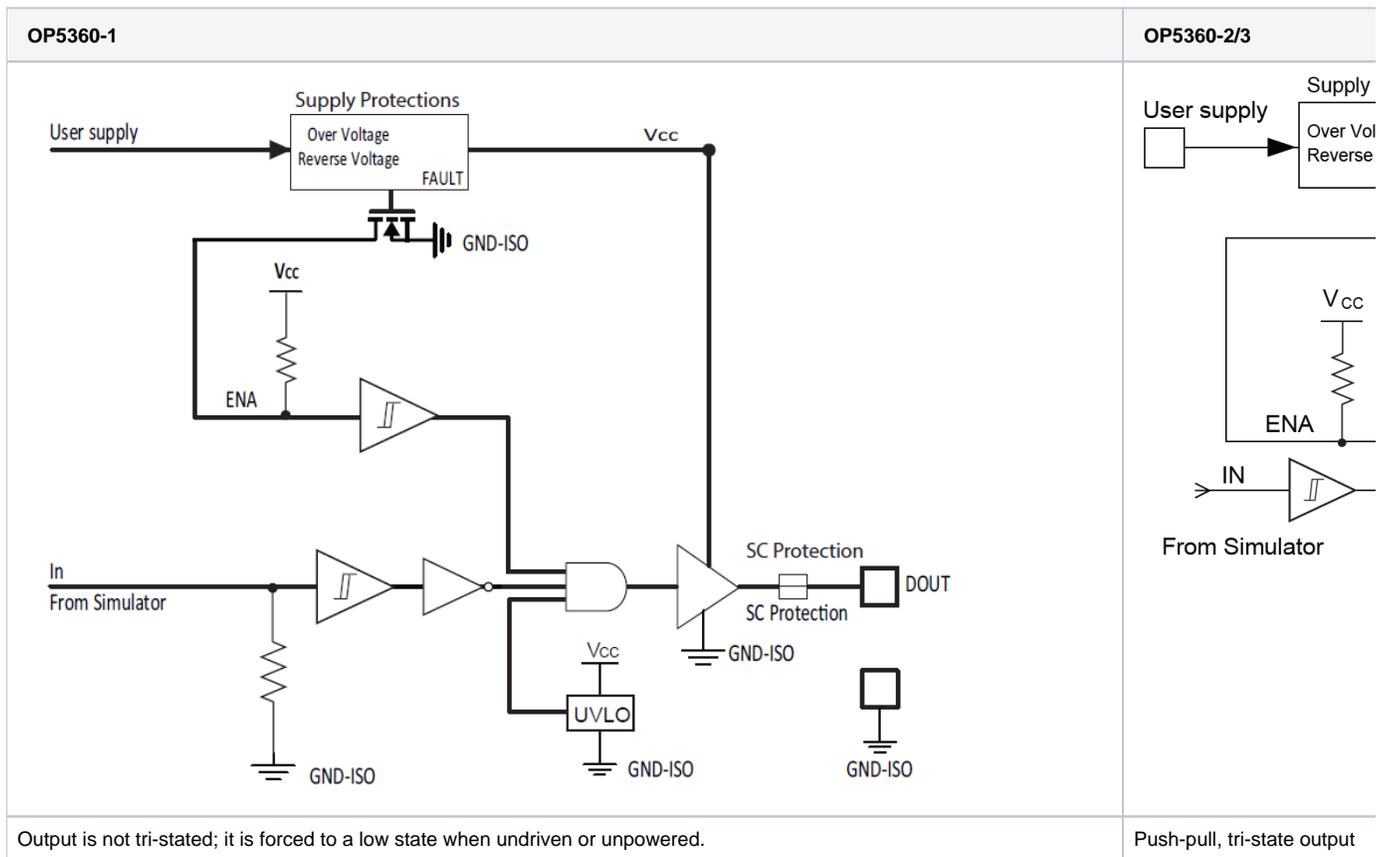
- **OP5360-1** produces output signals at up to 15 Vdc
- **OP5360-2/3** produces output signals at up to 30 Vdc

Main Features

- 32 digital output push-pull channels, organized into two banks of 16 channels each
- 5 to 15V or 5 to 30V output range depending on the module selected
- Load current up to 50 mA DC per output, sink or source with no trip action
- Over-voltage and reverse-voltage supply protection
- Short-circuit current limitation
- Operating frequency : DC - 500 kHz
- Low ON/OFF time propagation delay at high voltages (see [OP5360 Specifications](#) for delay values)

Channel Description

The schematic below represents the electrical circuit of one channel.



The output is referenced to the Vref voltage supplied by the user via a dedicated input pin on the DB37Fconector of the chassis in which the module is installed. Each bank of 16 channels can be referenced to a different voltage level.

Two consecutive outputs(for example DOUT_0 and DOUT_1, DOUT_2 and DOUT_3) may be connected in parallel for higher (double) current capability.

The maximum current is 50 mA DC per output, sink or source with no trip action. Higher currents will trip the current protection.

Use of a damping circuit (a serial resistor-capacitor circuit tied to the GND as close as possible to the unit under test) may be necessary to minimize ringing and over/undershoot depending on the distance between the simulator and the unit under test, The following parameters are usually a good starting point for the RC values: R=150, C = 100pF.

Typical Use Cases

The characteristics of the module make it suitable in simulations of applications such as:

- MOSFET and IGBT switching
- Switch-mode power supplies
- DC-to-DC converters
- Motor control, solar power (photovoltaics)

For compatibility of this card, please consult the [Software compatibility](#) and [Hardware compatibility](#) tables.