

## WaveSeries MPI-Opto

### High Speed Optocoupler

# NEW



The MPI-Opto offers isolation and signal level conversion for discrete signals at frequencies up to 50KHz.

It also provides 2 isolated outputs making it ideal for driving local displays and a PLC or DCS simultaneously. The input can be 5Vdc or 12-24Vdc while the outputs are rated 12-28Vdc @ 50mA.

The input of the MPI-Opto can be provided by a proximity switch, photoelectric sensor or turbine flowmeter and can be either sinking or sourcing. Each output channel provides inverted and non-inverted signals. Applications include NPN-PNP conversion, signal inverter, level conversion, signal splitter and more.

- Up to 50kHz switching frequency
- 1 input and 2 isolated outputs
- 5V and 12-28V inputs
- Can be used with sinking or sourcing sensors
- The innovative Wavebox housing is compact and uses plug-and-socket connections
- **CSA Class 1 Division 2 certified**

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#### Mexico

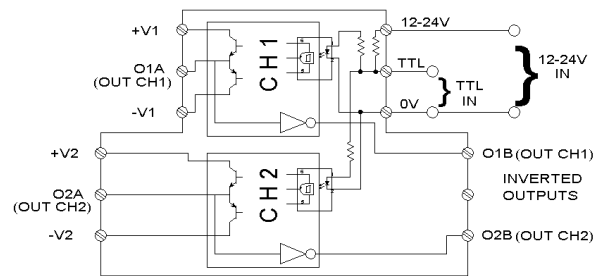
Weidmüller, S.A. de C.V.  
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## MPI-Opto

## Solid State Relay

**Schematic diagram**

- dual input; 5V or 12-28V
- 2 isolated outputs
- sinking or sourcing outputs
- up to 50 kHz switching frequency
- inverting and non-inverting outputs
- 3000Vac RMS isolation
- compact; just 18mm wide
- mounts on 35mm DIN rail
- **CSA approved, Class 1 Division 2 groups A, B, C, D; temperature code T4A**
- CE marked



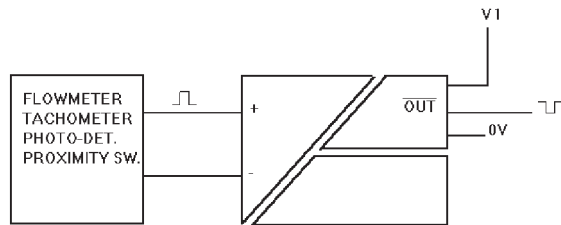
OUTPUTS: SINK OR SOURCE 50mA MAX.

**Rated data**

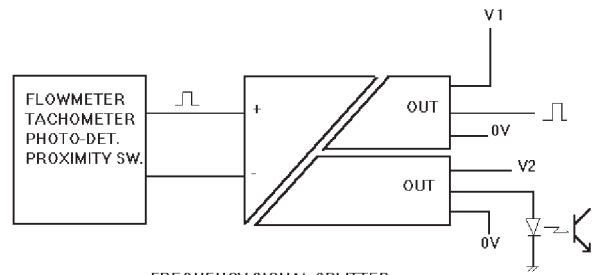
|                           |                           |                                       |
|---------------------------|---------------------------|---------------------------------------|
| Input                     |                           |                                       |
| On-state voltage          | TTL input                 | 3.2-5Vdc                              |
|                           | 12-24V input              | 10-28Vdc                              |
| Off-state voltage         | TTL input                 | 0-0.8Vdc                              |
|                           | 12-24Vdc input            | 0-3Vdc                                |
| Current                   | @5V                       | 4mA on-state                          |
|                           | @12Vdc                    | 4mA on-state                          |
|                           | @24Vdc                    | 8mA on-state                          |
| Output                    |                           |                                       |
| Voltage                   |                           | 12-28Vdc                              |
| Current                   |                           | 50mA max. per output (sink or source) |
| Low-state voltage drop    |                           | <1V                                   |
| High state voltage supply |                           | Vs - 1V                               |
| Max. switching frequency  |                           | 50kHz                                 |
| General                   |                           |                                       |
| Isolation                 | input-output              | 3000Vac RMS                           |
|                           | output channel-to-channel | 3000Vac RMS                           |
| Temperature               | operating                 | 0°C to 55°C                           |
|                           | storage                   | -20°C to + 70°C                       |
| Wire size                 |                           | 22-12AWG                              |
| Dimensions in mm          | width                     | 17.7                                  |
|                           | length                    | 90.0                                  |
|                           | height on rail TS32       | n/a                                   |
|                           | height on rail TS35 x 7.5 | 105.2                                 |

### Ordering data

[illegible]

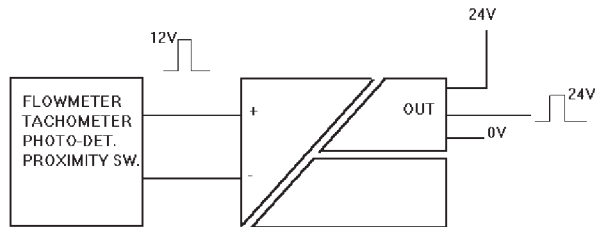


FREQUENCY SIGNAL INVERTER

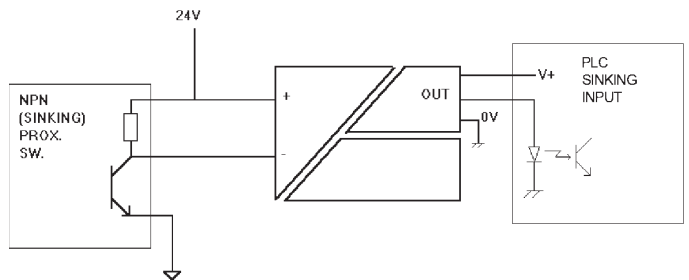


FREQUENCY SIGNAL SPLITTER

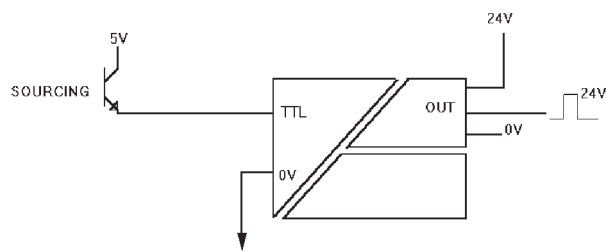
If V1 is same supply as V2 there is no isolation between output signals  
If V2 is a separate supply from V1 the output signals are isolated from each other



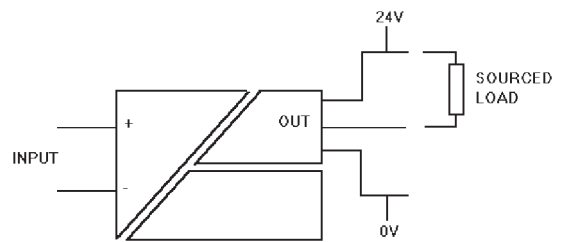
LEVEL CONVERSION



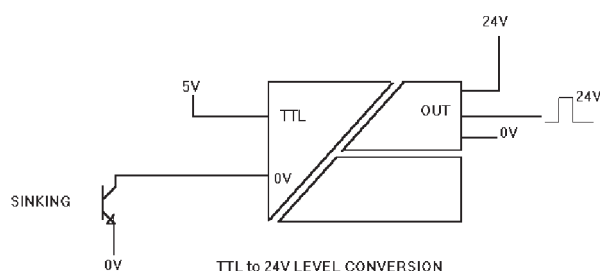
NPN-PNP CONVERSION



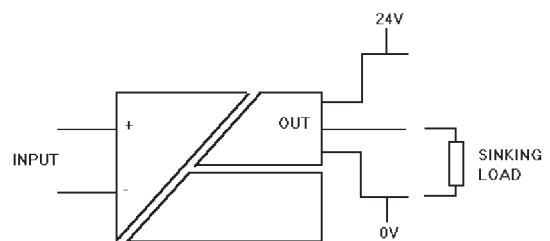
TTL TO 24V CONVERSION



SINKING OUTPUT



TTL to 24V LEVEL CONVERSION



SOURCING OUTPUT