

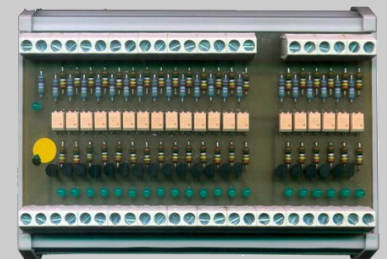
**• Standard insulation interface : 1,2,4, 8, 16 or 32 channels**

*Interfacing with PLC  
Impedance or level adaptation  
digital level isolator*  
- can be use in digital input or output  
- EMC protection



**• Board for specific interface**

*According to customer specifications :  
Impedance or level adaptation  
and EMC protection  
Communicating version on industrial bus  
(Profibus , Modbus , Modbus TCP, .....)*



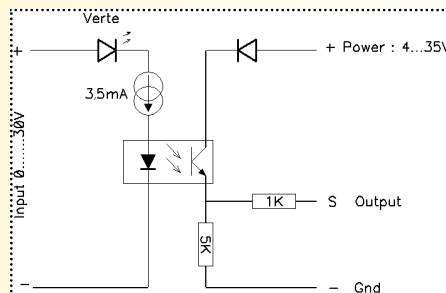
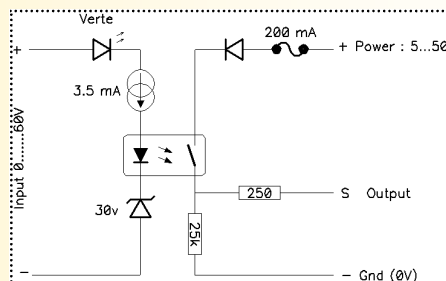
**In the production field, the electrical equipment of machines, the technical management in the distribution of energy, and in industrial processes, this board enable secure exchange of signals between the periphery and the central command system. Providing insulation, protection and level adaptation.**

**Description :**

- Digital interface, can be use as PLC input or output, enable insulation, level adaptation and eventually signal amplification.  
(possibility to have up to 500 mA of output current)
- Each channel is composed of a current limiter, an EMC protection, a state display led and an insulation barrier.
- available version for analog signal commutation (input selector with digital command)
- Protection against polarity reversal and shortcut
- Plastic holder for DIN rail mounting (symmetrical or not)
- Spring terminals (nominal section: 1,5 mm<sup>2</sup>)
- Green leds indicating inputs states
- Galvanic insulation > 1500 Vrms
- Commutation time < 2 msec
- Limitation of input absorbed current < 3.5mA  
(internal current generator)
- Electromagnetic fields total immunity
- Good vibrations resistance (fully static conception)
- conformal coating
- Available up to 32 channels

**Synoptic of a channel**

Can be different according to requested adaptation



Version and order code:

[Request a quote](#)

**OPT25ig-xx / Vin / Vout**

- xx** : Number of channels in a module ( 1 to 32)
- Vin** : Maximal voltage input (logical level of 1)
- Vout** : Voltage of output (logical level of 1)

*(Specify the output current wanted if necessary)*

**CHARACTERISTICS**

Closing time : 1 mS typ. (maxi 2 mS)  
 Opening time : 0.1 mS typ. (maxi 0.5mS)  
 Bounce time : NA  
 Operating number : unlimited (static technology)  
 Dielectric strength : 1500V continuously  
 Insulation resistance : > 10<sup>3</sup> Mohms (at 500 V)  
 Commutation level : Vcc / 2 typical +/-30 %  
 overshoot on input: +15% max (continuous)  
 Current consumption for each digital input :  
 Level 1 : < 5 mA  
 Level 0 : < 50uA  
 Output leakage current : < 1uA

**POWER SUPPLY**

Every direct voltage is possible  
 5 / 12 / 24 / 48 / 60 Vdc (100mW by channel)  
 Overload protection by fuse

**ENVIRONMENT**

Dielectric strength (input / output): 1500 Vac  
 Operating temperature : - 25 ... +60 °C  
 Storage temperature : - 40 ... +85 °C  
 Relative humidity : 85 % (not condensed)  
 Weight ~ 200 g  
 MTBF (MIL HDBK 217F) > 4 000 000 Hrs @ 25°C  
 Lifetime 200 000 Hrs @ 30°C  
 Lifetime 80 000 Hrs @ 45°C

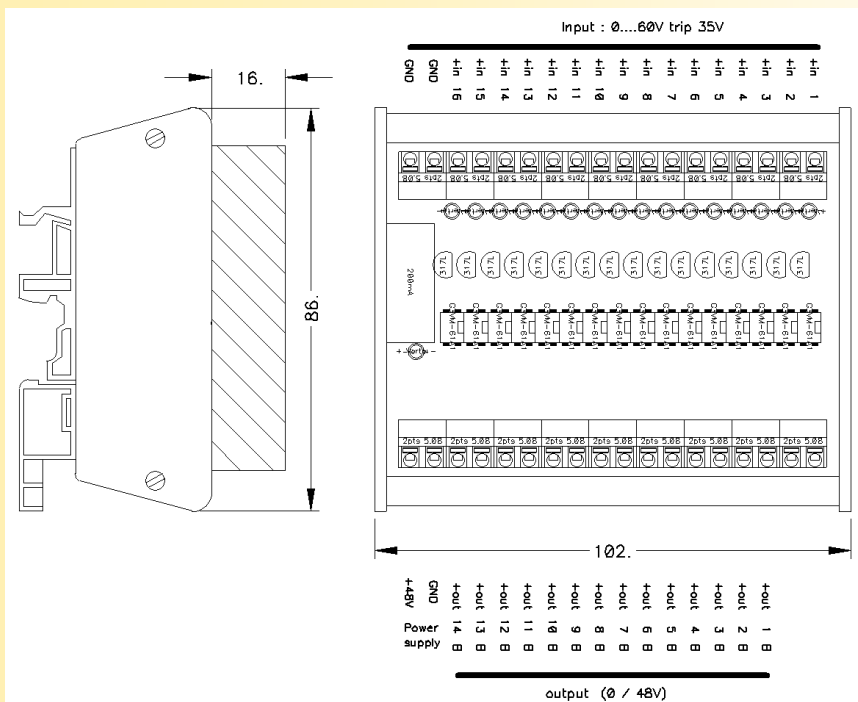
*Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE*

| Immunity standard for industrial environments<br>EN 61000-6-2 |                         | Emission standard for industrial environments<br>EN 61000-6-4 |
|---|-------------------------|---|
| EN 61000-4-2 ESD  | EN 61000-4-8 AC MF      | EN 55011<br><br>group 1<br>class A                            |
| EN 61000-4-3 RF   | EN 61000-4-9 pulse MF   |   |
| EN 61000-4-4 EFT  | EN 61000-4-11 AC dips   |   |
| EN 61000-4-5 CWG  | EN 61000-4-12 ring wave |   |
| EN 61000-4-6 RF   | EN 61000-4-29 DC dips   |   |



**WIRING AND OUTLINE DIMENSIONS: (execution example)**

16 channels version with level adaptation



1 channel version OPT25IG1

