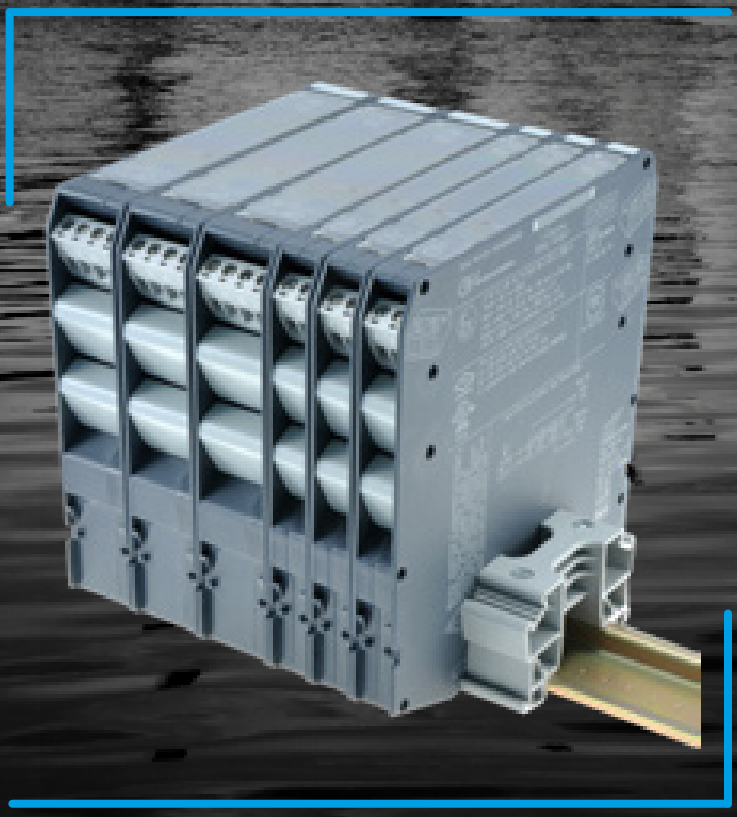
Galvanic Isolators
D6000 Series

03

GM International new universal mount Galvanic Isolators provide a simple and cost effective means of implementing isolation in non hazardous applications where SIL certification and/or high reliability are a requirement.

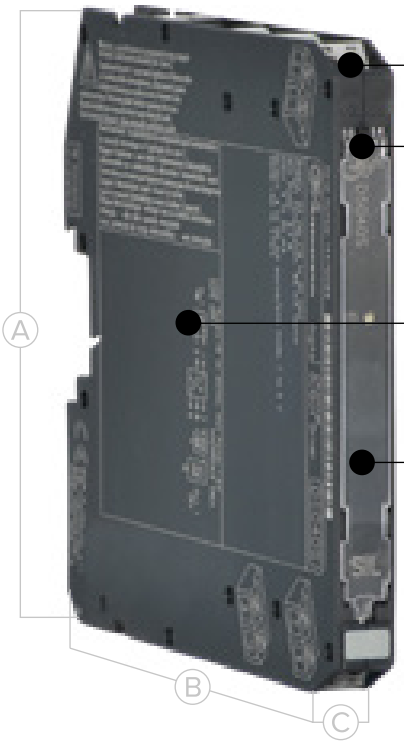
SIL 2



STRENGTHS

- **SIL 2:** TÜV certification; according IEC 61508:2010, Ed.2
- **Reduced Foot Print: High density:** 1, 2, 4 or 8 ch.s each
- **Simplified Installation/Config.:** DIP switch configurability
- **Faster Reaction Time; Lower Down Time:** LED indication for power, signal status and line fault
- **Lower Ownership Cost:** Certified for 20 years operation
- **Reduced Spare Inventory:** Universal Mounting (Stand Alone DIN-Rail, Power Bus System and Termination Boards)
- **Improved Reliability:** Low power consumption and heat dissipation
- **Higher Reliability In & Outdoor:** Certified -40° to + 70° C
- **RS-485 Modbus** output version available

Structure



Removable terminal blocks with engraved identification

Lexan detachable front cover

Laser engraving on entire enclosure and terminal blocks to provide accurate, safe and permanent marking of parameters, schematic diagrams, connections and instructions.

LEDs for power, status and fault indication are visible through the transparent cover

Ⓐ 120 mm
Ⓑ 123 mm
Ⓒ D60xx: 12,5 mm
D62xx: 22,5 mm

ENCLOSURE CHARACTERISTICS

- High channel density (3/6/12 mm per channel) resulting from innovative circuit design using advanced surface mount components
- Single, dual or quad channel models
- Plug-in screw terminal blocks to secure wires up to 2.5 mm^2
- Configuration components are easily accessed by removing the side cover or via connector front panel

Enhanced Galvanic Isolators

GM International SIL 2 certified Isolators are suitable for applications in all industrial sectors and designed to achieve the highest possible reliability and availability through the use of high temperature class components and low dissipation circuitry.
By avoiding the use of electrolytical capacitors, and with state-of-the-art assembly and testing facilities, 20 years useful life time is achieved.

Operating temperature certified

from -40°C to +70°C

LONGER LIFETIME

Capability to withstand higher temperatures, improves the lifetime in normal conditions.

- Operating temperature certified from -40°C to +70°C
- Very high reliability in extreme environment applications.
- G3 conformal coating
- Reduced cabinet dimensions, require less ventilation.

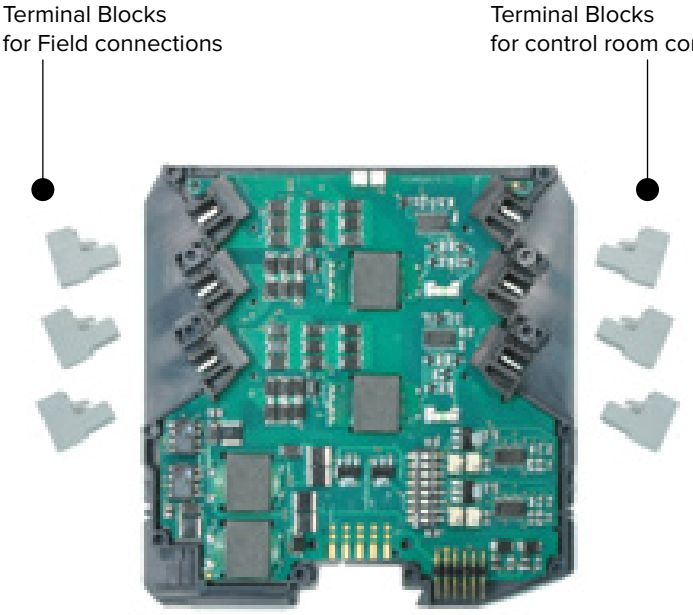
WIDE FUNCTIONALITY

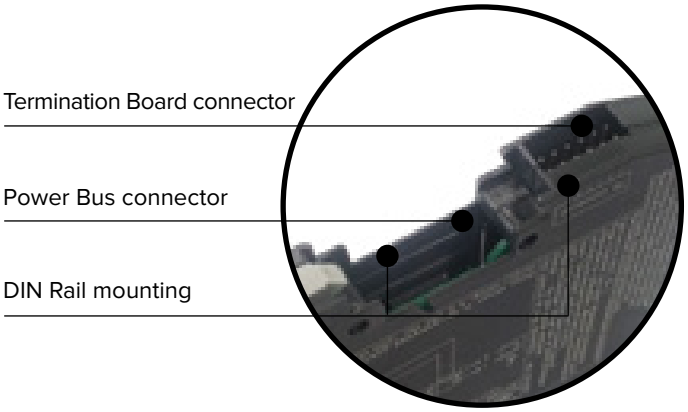
- Modules suitable for **SIL 2** applications according to IEC61508, IEC61511
- Three port galvanic isolation to eliminate noise, ground loop problems
- Line fault alarm detects open or short circuit of field cables
- Optional power bus DIN-Rail connector
- Standard Termination Board with custom connectors for integration into customized Boards
- EMC Compatibility to EN61000-6-2, EN61000-6-4, EN61326-1, EN61326-3-1 for safety system
- DIP switch configurability for easy field setup
- LED indication for power, signal status and line fault conditions
- Modules accept DC power supply over a wide range for 24 Vdc (18-30 Vdc) applications

Universal Mounting units

The **same device** can be used in **all applications** to reduce spare inventory.

- DIN-rail stand-alone devices
- Standard and customized termination boards
- Power bus using standard TS 35 DIN-rail



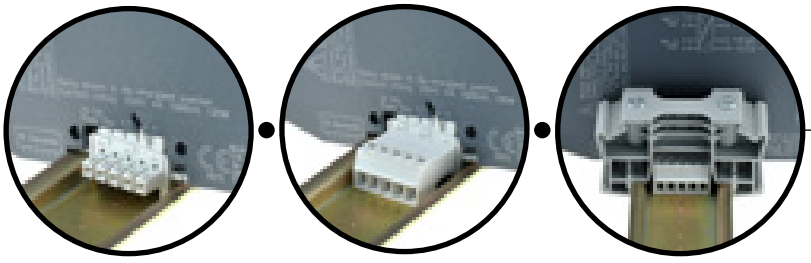


Enhanced Power Bus Mounting

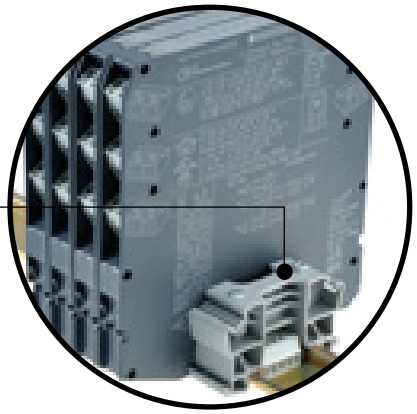
24 Vdc Power Supply Voltage **can be applied** to the module by directly connecting to the plug-in Terminal Block of each module, or **via the Power Bus System**. The system consists of standard DIN-Rail modules mounted on DIN-Rail Bus connectors. The maximum allowed powering capacity per trunk is **8 A**. It is always possible to remove modules, without disconnecting the bus connector which remains attached to the DIN-Rail. Communication bus is provided, on suitable models, to transmit via Modbus to DCS PLC logic solver. Cumulative Fault Alarm indication is provided on the Bus connection.

D5202S redundant power supply feed module provides SPST Relay contact for common and power supply faults; both supply voltages are **independently monitored**.

- Redundant 4 Amp power supply with alarm
- Remote alarm indication
- Modules can be combined for additional redundancy



Bus plug-in connector *Bus connector terminal* *DIN Rail stopper*



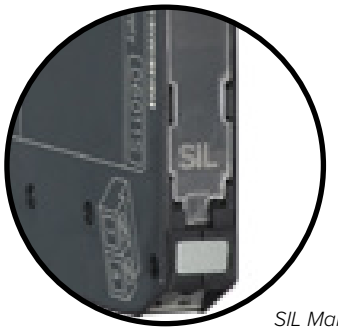
SIL Certification

GM International D6000 series is designed and certified **SIL 2** according to IEC 61508 ed.2 and 61511 ed.2 **latest standards**. GM International System Capability SC3 allow the use of our isolators in 1oo2 or 2oo3 architecture for up to SIL 3 applications.

SIL data is guaranteed for a useful life time of **20 years** thanks to GM International's state-of-the-art solutions and manufacturing excellence. G3 conformal coating and vibration proof design guarantee problem free long operation life in standard and harsh conditions:

- High signal transfer accuracy and repeatability
- Advanced circuitry provides very low heat dissipation, ensuring modules run cool despite their high density and functionality
- SMD manufacturing for a long, reliable life
- Complete absence of electrolytic capacitors ensures minimum 20 years lifetime

20 years SIL certification



SIL Marking

Configuration Tools & Software

SWC5090 software is designed to provide a PC user interface to configure suitable D6000, D6200 modules, via PPC5092 adapter.

It allows the user to easily:

- Read and write configuration parameters to the unit
- Store and restore data to and from local hard drive for backup or archive
- Load factory default configurations
- Monitor real time Input values for debug or test
- Print a report sheet containing configuration parameters and additional information

SWC5090 is freely distributed on our website: **www.gminternational.com**

Easy USB configuration



PPC5092 interface allows the configuration of D6000, D6200 modules via SWC5090 software.
Modules are supplied via USB and therefore do not need external power supply while being programmed.
PPC5092 comes with mini-USB cable and CD-Rom containing SWC5090 software.

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