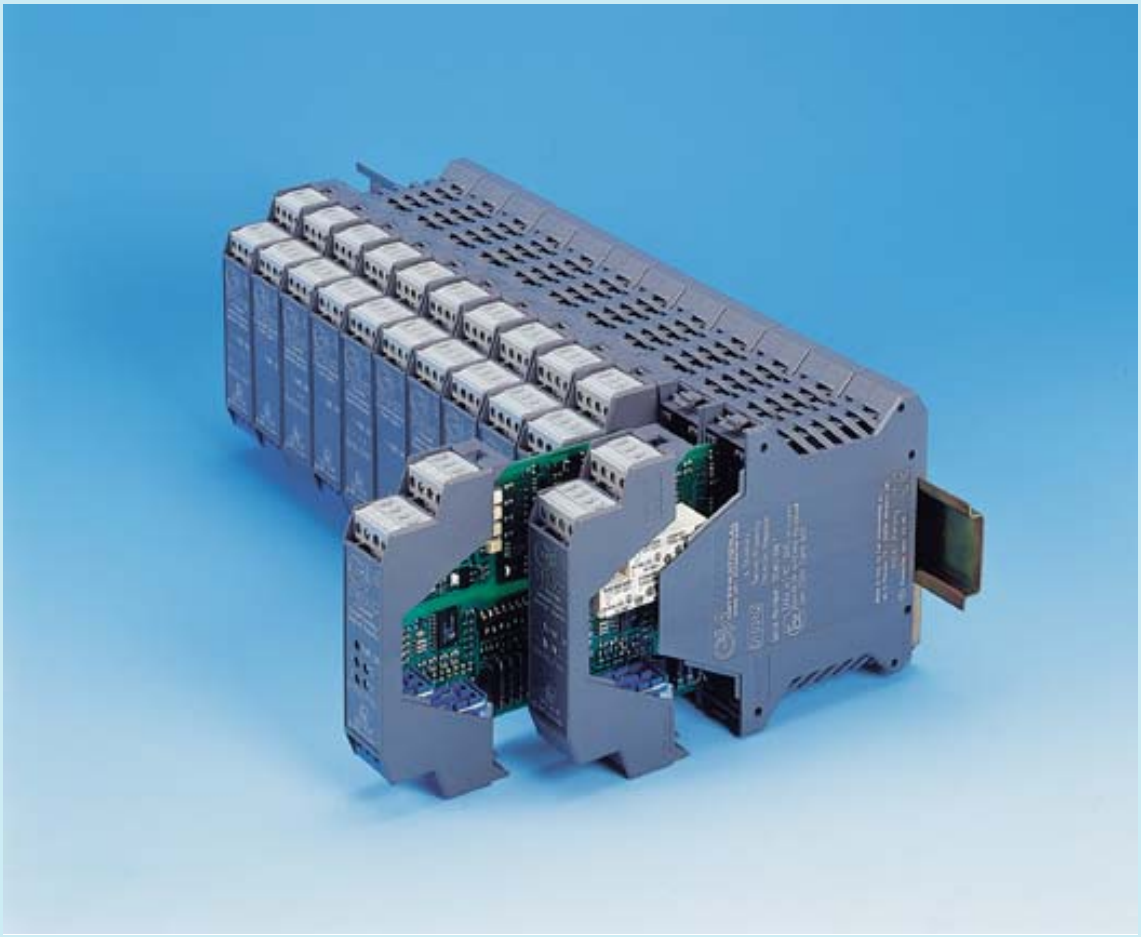
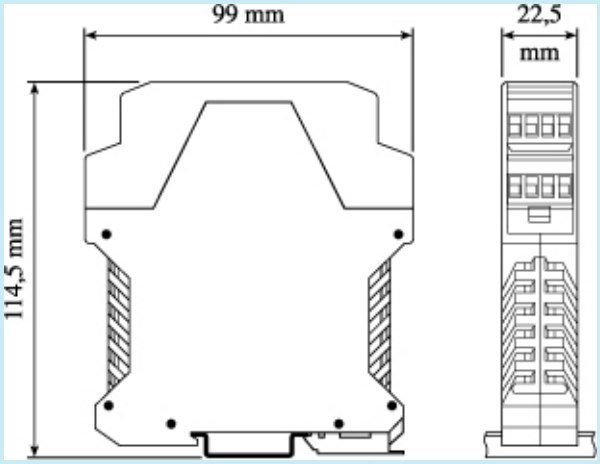
D1000 Series



Intrinsically Safe Isolators
Converters
Signal Conditioners
Trip Amplifiers
DIN Rail Mounting
Suitable for
SIL 2 and / or SIL 3 Applications

D1000 Series

G.M. International new DIN RAIL mounting Intrinsically Safe Galvanic Isolators.
The D Range provides the most simple and cost effective means of implementing Intrinsic Safety into your Hazardous Areas/Locations applications.



High Packing Density

- High channel density result from innovative circuit design using advanced surface mount components.
- Ultra slim 4 channels 22,5 mm wide DIN rail mounting modules.
- 6 mm per channel.
- 176 I/O channels per metre of DIN rail.
- Single, dual or quad channel models.

High Performance

- High signal transfer accuracy and repeatability.
- Advanced circuitry provides low heat dissipation, ensuring modules run cool despite their high functionality.
- Low power consumption.
- SMD manufacturing to maximise long, reliable life.

Wide Functionality

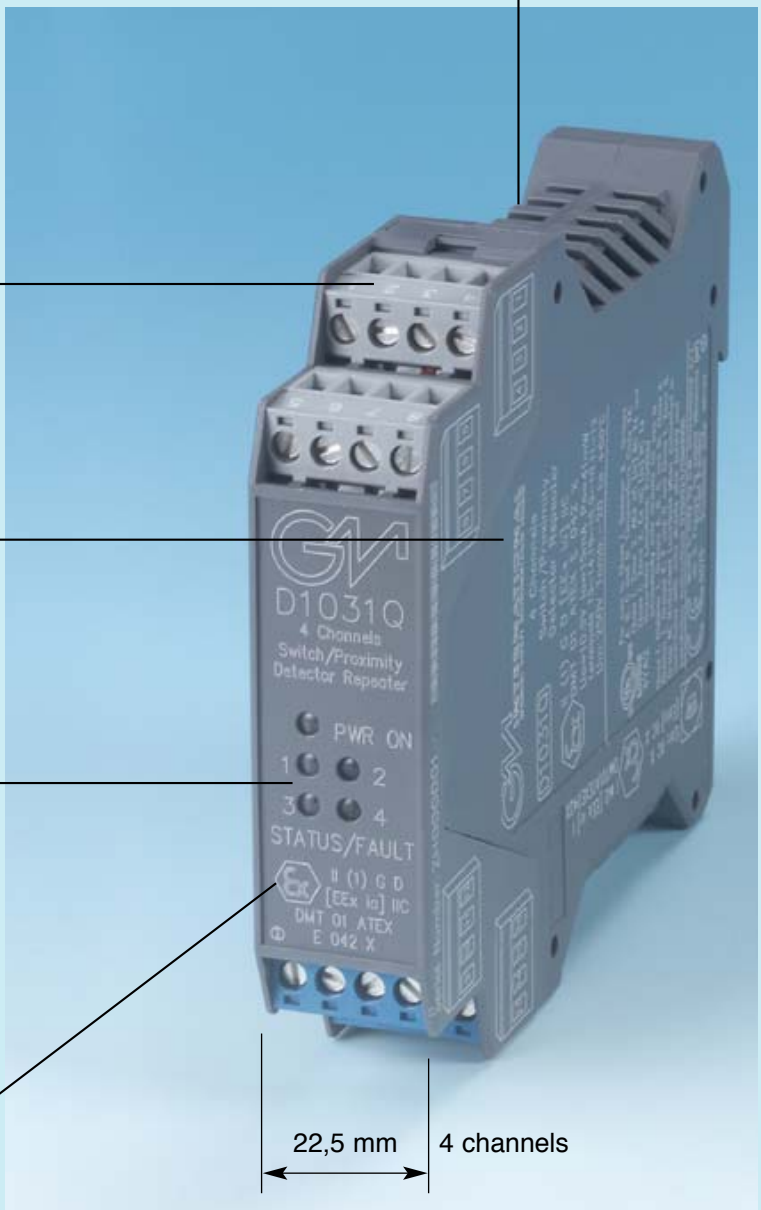
- Wide range of digital switch and analog I/O.
- Relay contacts rated for 2 amp. to directly switch high loads.
- Three port galvanic isolation to eliminate noise, ground loop problems and to provide Intrinsic Safety without a high integrity safety earth connection.
- Line fault alarm detects open or short circuit of field cables.
- Optional power bus enclosure.

General Features

- Single channel versions available if required, to provide single loop integrity on Emergency Shut Down and Fire & Gas applications.
- Configuration using DIP switch for easy field set up.
- LED indication for power, signal status and line fault conditions.
- 35 mm (Top Hat) DIN Rail.
- Plug-in screw terminal blocks to secure termination up to 2,5 mm^2.
- Accept DC power supply over a wide (20-30 V) range.
- 20 modules are suitable for SIL 2 and / or SIL 3 applications according to IEC 61508, IEC 61511.
- 22 modules can be powered from 10 to 30 Vdc for 12 or 24 Vdc Applications.
- 2 modules (D1130 - D1180) can be powered from 85 to 264 Vac, 50-400 Hz, or from 100 to 350 Vdc.
- Wide operating temperature range. (-20 +60 °C).

D1000 Series an "Explosive" Packing

D1000 Series
a Packing which Cares for Details



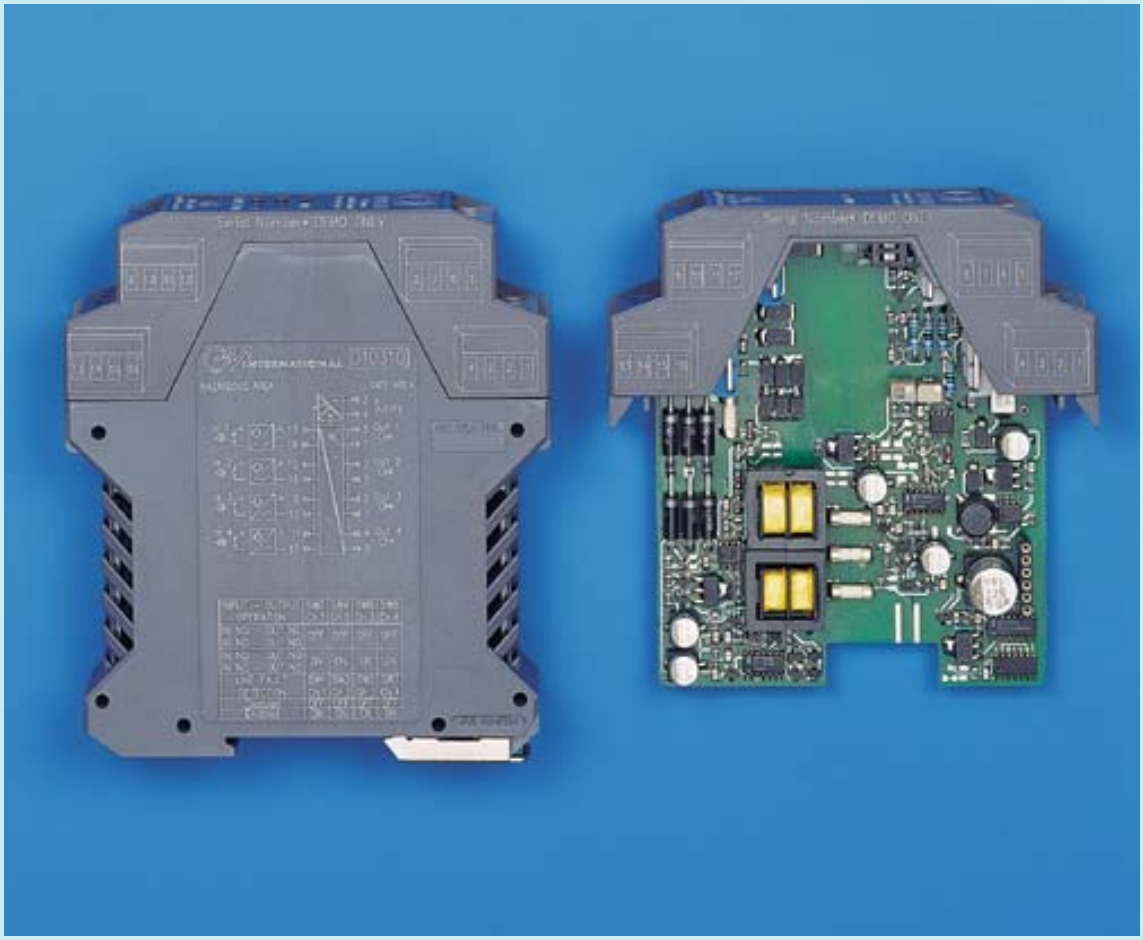
D1000 Series
a Packing which Cares for Details

Plug-in Terminal Blocks

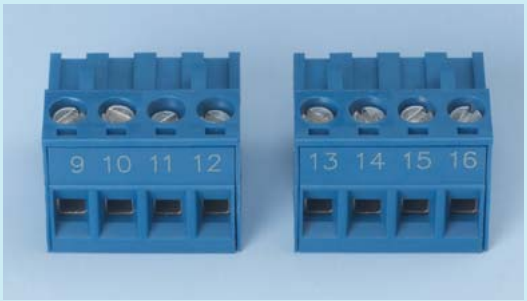
Blue Intrinsically
Safe Terminal Blocks
plug-in type.

D1000 Series
a Packing which Cares for Details

Terminal Blocks identification



Hazardous Area Terminal Block



Safe Area Terminal Block

D1000 Series
a Packing which Cares for Details

Front panel and P.C.B., removable with a tool slight pressure

D1000 Series
a Packing which Cares for Details

TAG Housing

The New TAG Housing, made of transparent LEXAN, can fit a paper strip label (preferably of 140 gr paper).

An electronic file (free of charge) is available to prepare up to 40 labels per one A4 sheet with a laser printer.

As alternative, an A4 sheet with 72 Mylar adhesive labels is available.

The electronic file to prepare these labels is available on our web site.

D1000 Series
a Packing which Cares for Details

Front panel integral with Printed Circuit Board plug-in type

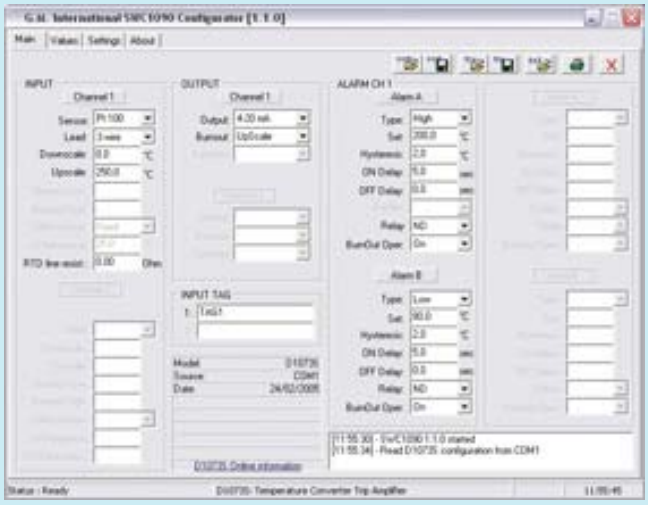
D1000 Series
Pocket Portable Configurator

MODEL PPC 1090

A very small Pocket Portable Configurator suitable to program type of input Sensors, input and output Ranges, Burnout conditions, High/Low Alarm mode, Relay NE/ND, Alarm Trip Point, Deadband value and Alarm Delay.
For the Series 1000 units, DIN or Eurocard, which require access to the Configuration.
(powered by the unit in configuration).

D1000 Series
PC Adapter for Software Configuration

MODEL PPC 1092
adapter with CABF010 cable to interface PC for a complete configuration of Input and Output parameters



USER FRIENDLY CONFIGURATION WITH PC AND PPC1092 ADAPTER

D1000 Series Power Bus Modules

Power Supply Voltage 24 Vdc can be applied to the module, by connecting directly the voltage to the Plug-in Terminal Block (3+, 4-) of each module, or via the **Power Bus System.** The system consists of a standard Din Rail Bar and modules with Bus Connectors (Female on one side and Male on the opposite side) of 8 Amp. Capacity. It is always possible to remove modules, without disconnecting the connectors, because modules are Plug- in types. When the Power Bus is used, the Supply Contacts (3+, 4-) on the Terminal Block are omitted to avoid accidental short circuits on the Power Bus.

Module Enclosure with Power Bus Connector Female Side

Module Enclosure with Power bus Connector Male side

Module with Power Bus Male Termination Block

Set of Modules with Power Bus

D1000 Series

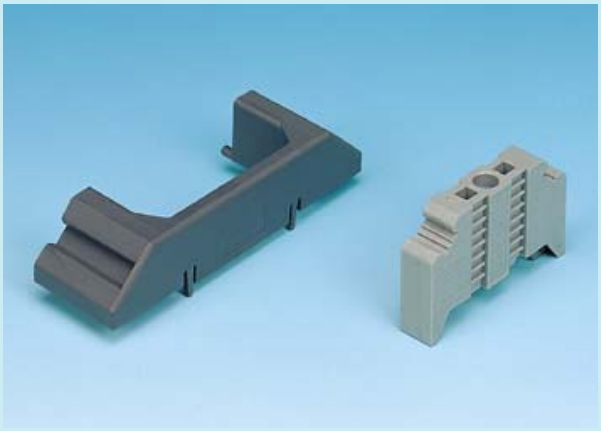
Connector Output Custom Panels for 8-16 Units (32-64 channels)

Custom Boards for ABB System Six DCS

Custom Boards for Invensys DCS

D1000 Series Accessories

Anchor (Mchp 065) and Stopper (Mor 016) for DIN-Rail



Code	Description
D1000B	Housing with Power Bus
Mor 015	Terminal Block male, vertical out, for Power Bus
Mor 016	DIN-Rail Stopper
Mor 017	Terminal Block male, orizontal out, for Power Bus
Mor 022	Terminal Block female, orizontal out, for Power Bus
Mchp 065	DIN-Rail Anchor
Mchp 139	5 mm spacer for modules on custom boards
CABF 010	Sub-D 9 poles, female-female, Nul-Modem cable
Opz 91	Cold Junction Compensator to be used with THCs Inputs
PPC1090	Pocket Portable Configurator
PPC1092	PC Adapter, replace PPC1090 using PC for configuration
D1000R	19" Rack Unit, suitable for 16 modules

Mor 015 - Terminal Block male, vertical out, for Power Bus

Mchp 139 - 5 mm spacer for modules on custom boards, D1012Q and PSD1001C modules

Mor 017 - Terminal Block male, orizontal out, for Power Bus

Mor 022 - Terminal Block female, orizontal out, for Power Bus

D1000 Series Accessories

19" Rack Unit Type D1000R for Rack Mounting of Series D1000 Isolators

PPC1090 - Pocket portable configurator with cable

CABF 010 - Sub-D 9 poles, female-female, Nul-Modem cable + PPC1092 - PC Adapter for configuration

D1000 B - Housing with Power Bus