GEFRAN

G3-AM8

4 ANALOG INPUTS + 4 ANALOG OUTPUTS MODULE

PROFILE

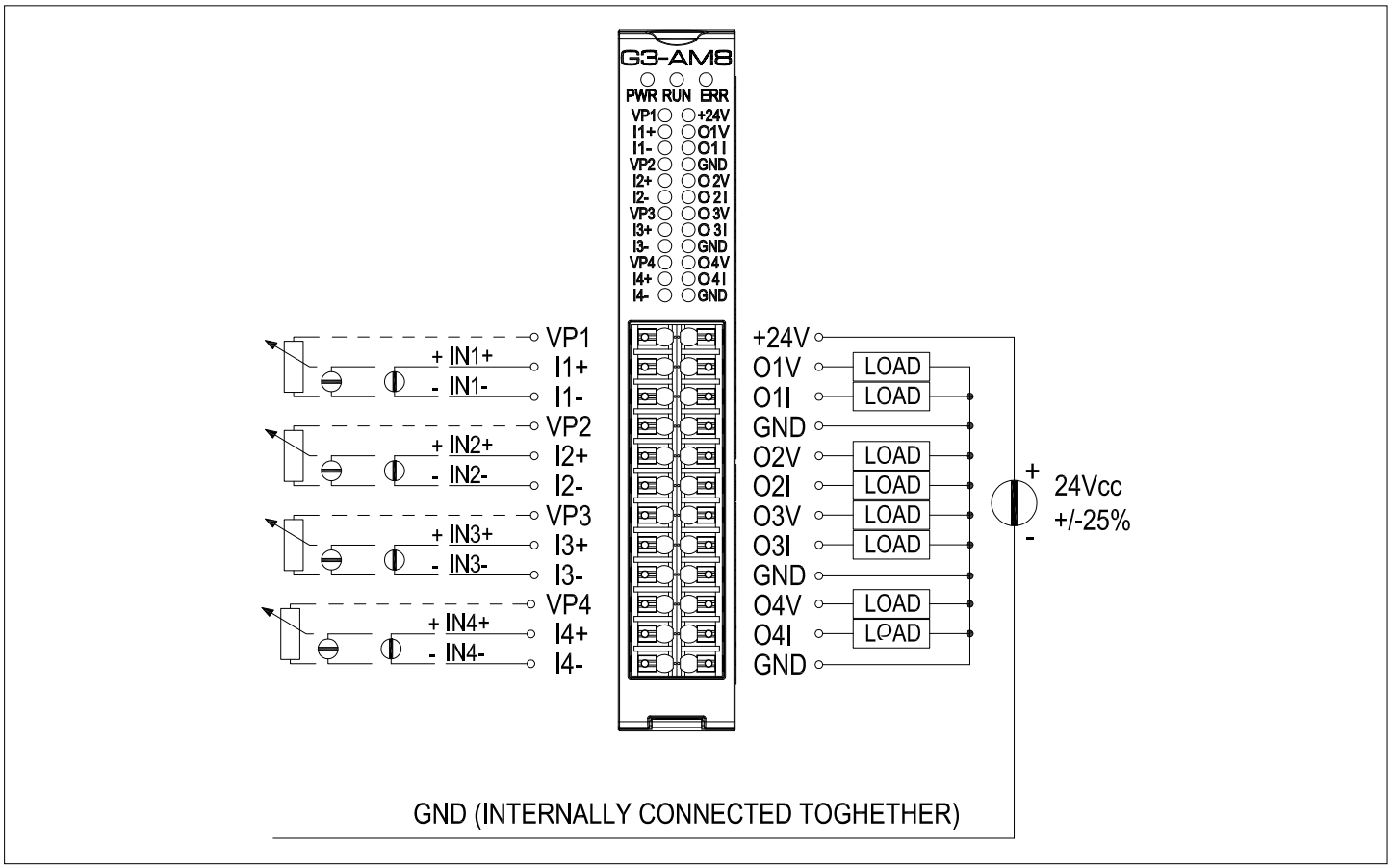
The **G3-AM8** module has 4 isolated analog inputs and 4 isolated analog outputs that can be used to read signals from various types of linear sensors, from retransmitting units, servocontrols, position systems and to send reference signals to drives, servocontrols, power solid state relays with linear input.
Inputs can be software configurable as voltage (0…10V, ±10V), current (0…20mA, 4…20mA) or potentiometer (>1kΩ).
Outputs can be software configurable as voltage output (±10V) or current output (0…20mA, 4…20mA).
G3-AM8 can be used with all the G-Mation gateways and Px modules from which it receives power supply.
G3-AM8 can acquire 4 analog inputs in less than 100µs for 4 channels and refresh 4 analog outputs in less than 80µs allowing fast and accurate closed loop and process applications in combination with EtherCAT communication.

TECHNICAL DATA	
4 analog inputs	16 bit A/D conversion
Sample time	< 100µs for 4 channels
Inputs type	Potentiometer min. 1kΩ Linear 0...10V, ±10V Linear 0...20mA, 4...20mA
Input impedance	Potentiometer > 1MΩ Linear 0...10V, ±10V > 1MΩ Linear 0/4...20mA = 500Ω
4 analog output	16 bit A/D conversion
Refresh time	< 80µs for 4 channels (includes analog settling time)
Output types	Linear ±10V max 20mA each channel Linear 0...20mA, 4...20mA, max 600Ω load
Accuracy	Better than 0.1% at full scale over the entire temperature range -10°C to +55°C
Power supply	From G3-ECAT or Px CPU for control electronics, +24V±25%, 0.5A max for field signals
Potentiometer power supply	4.096 V ± 0.03%
Overvoltage Category	II
Power dissipation	1,2 W, ±5%
MECHANICAL DATA	
Dimensions	120x110x20 mm
Weight	150 g
Protection level	IP20 For UL: not UL evaluated. Open type device
Connector	Front 24 pin-5.08 mm pitch removable connection system with spring wire retention, no tool required to fix or remove wires
Attachment	Mechanically snaps onto DIN rail
ENVIRONMENTAL CONDITIONS	
Working temperature	-10...55°C
Storage temperature	-25...70°C
Humidity	max. 90% Rh not condensing
Pollution degree	2
Maximum altitude	2000 m

WIRING

For linear 0-10V ±10V 0/4-20mA use 2 pin shielded cable with 1 square mm max. cross-section. Connect shielding directly to the grounding rod and as close as possible to the module. Potentiometers use 3 pin shielded cable with 1 square mm max. cross-section. Connect shielding to the grounding rod and as close as possible to the module.
For outputs use unipolar cable with 1 square mm maximum cross-section. Bipolar analog outputs ±10V, use shielded cable with 1 square mm maximum cross-section. Power supply 24 VDC ± 25% 500 mA max.

INSTALLATION AND CONNECTIONS



ORDERING CODE

COMPLETE MODULE	G3-AM8	F092708
Front	G3-AM8 F	F092622
Electronic module	G3-AM8 E	F092608
Bus	G3-BUS	F092614

GEFRAN spa reserves the right to make aesthetic or functional changes at any time and without notice.

CE	This device conforms to European Union Directive 2014/30/EU and 2014/35/EU as amended with reference to generic standards: **EN 61000-6-2** (immunity in industrial environment) **EN 61000-6-4** (emission in industrial environment) - **EN 61010-1** (safety regulations).
c UL us	cULus listed, Conformity UL61010-1 - File: E198546

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