

#### PROFILE

The **G3-T8** is a temperature acquisition module which can manage up to 8 thermocouples or RTD temperature sensors.

The inputs are software configurable as type J, K, N, R, S, E, L, T, C, B thermocouple and RTD inputs.

Internal voltage-to-temperature linearization and cold junction compensation is based on standard ITS90 polinomials for the best accuracy. G3-ET8 can be connected with all the G-Mation gateways and Px CPU modules from which it receives power supply.

Acquisition time is less than 200 ms for the 8 channels. Temperatures are supplied in tenths of a degree Celsius (°C) or Fahrenheit (°F).

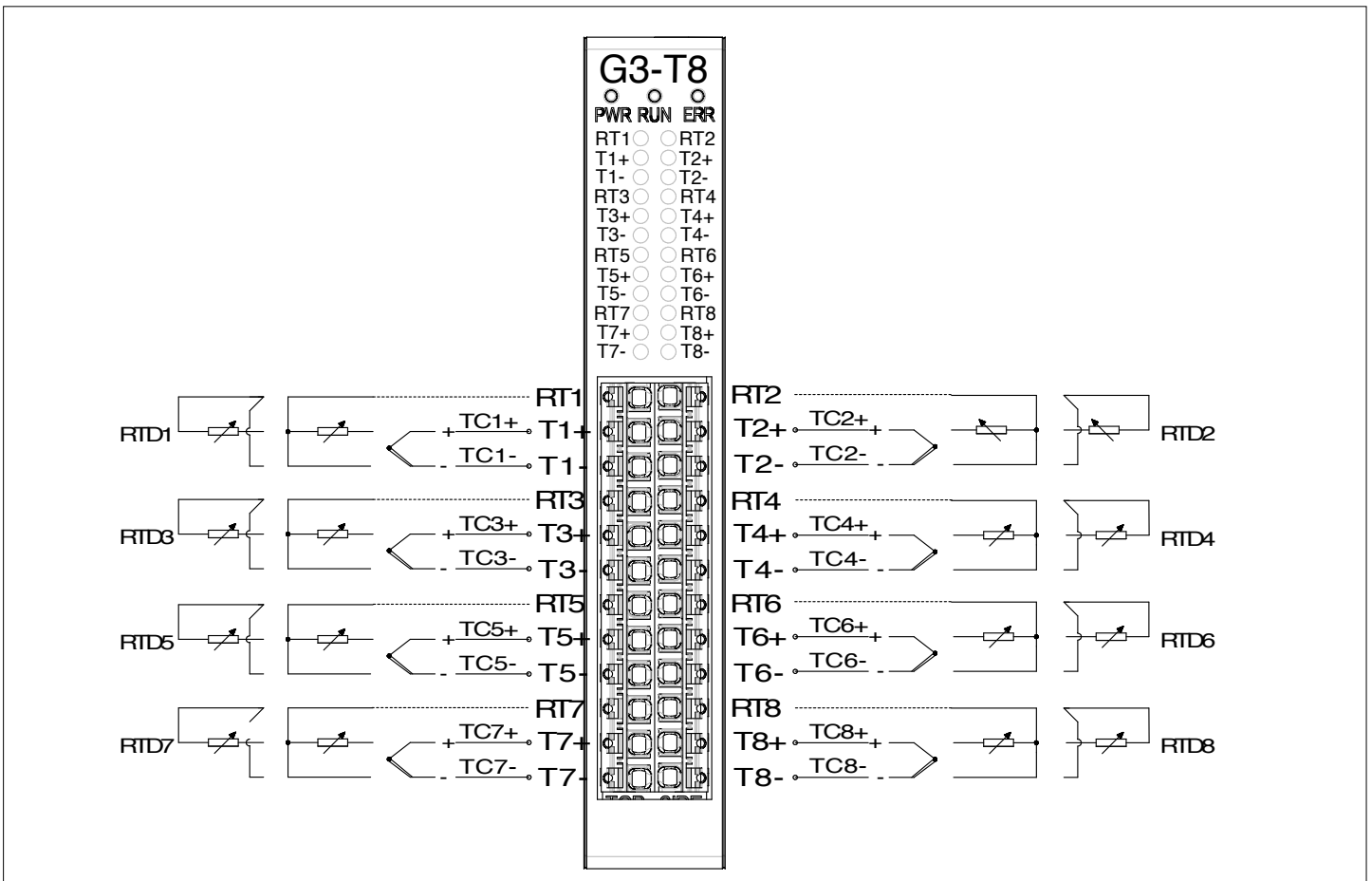


#### TECHNICAL DATA

8 optically isolated temperature inputs	24 bit A/D conversion 20 Hz pass band input impedance > 10MΩ sample time for 8 channels :200ms max. Input isolation up to 1,5 kV
Type of configurable input	Thermocouples: TC J, (-210.0...1200.0°C/-346.0...2192.0°F) TC K, (-270.0...1300.0°C/-454.0...2502.0°F) TC N, (-270.0...1300.0°C/-454.0...2372.0°F) TC R, (-50.0...1768.0°C/-58.0...3214.0°F) TC S, (-50.0...1768.0°C/-58.0...3214.0°F) TC E, (-270.0...1000.0°C/-454.0...1832.0°F) TC L, (-200.0...900.0°C/-328.0...1652.0°F) TC T, (-270.0...400.0°C/-454.0...752.0°F) TC U, (-200.0...600.0°C/-328.0...1112.0°F) TC C, (0.0...2315.0°C/32.0...4199.0°F) TC B, (40.0...1820.0°C/104.0...3308.0°F) RTDs (2 and 3 wires connection): Pt100 (-200.0...850.0°C/-328.0...1562.0°F) Pt1000 (-200.0...850.0°C/-328.0...1562.0°F)
Accuracy	Thermocouple accuracy: reading error of less than 0.1% at full scale Cold junction accuracy <1°C to 25°C Cold junction compensation: rejection greater than 40:1 as the room temperature RTD Input Accuracy: Calibration error < 0.1% referring to full scale Linearization error < 0.06°C Thermal drift <0.002% referred to full scale / °C of temperature change ambient ambient temperature of 25°C
Unit measure	Temperatures in tenths of °C/°F
Power supply	From G3-ECAT or Px CPU modules
Overvoltage Category	II
Power dissipation	1,2 W, 5%
<b>MECHANICAL DATA</b>	
Dimensions	120x110x20 mm
Weight	150 g

Protection level	IP20 For UL: not UL evaluated. Open type device
Connector	Front 24 pin-5.08mm pitch removable con-nection system with spring wire retention, no tool required to fix or remove wires
Attachment	Mechanically snaps onto DIN rail
<b>ENVIRONMENTAL CONDITIONS</b>	
Working temperature	-10...55°C
Storage temperature	-25...70°C
Humidity	max. 90% Rh not condensing
Pollution degree	2
Maximum altitude	2000 m

## INSTALLATION AND CONNECTIONS



## ORDERING CODE

COMPLETE MODULE	G3-T8	F092709
Front	G3-T8 F	F092623
Electronic module	G3-T8 E	F092609
Bus	G3-BUS	F092614

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

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