

ENG

AUTOMATION

CONTROLLERS, PROGRAMMERS



GEFRAN



Thanks to forty years of experience, Gefran is the world leader in the design and production of solutions for **measuring, controlling, and driving industrial production processes**.

We have 14 branches in 12 countries and a network of over 80 worldwide distributors.

QUALITY AND TECHNOLOGY

Gefran components are a **concentrate of technology**, the result of constant study and **collaboration with major research centres**. Gefran control instruments are characterised by continuous research and state-of-the-art technology, and provide **accurate control of variables such as temperature, pressure, force, humidity, and displacement**.

Gefran's know-how and experience guarantee **continuous** and practical solutions.

A COMPLETE LINE OF CONTROLLERS

Gefran offers a wide choice of PID controllers, from basic models (BASIC) for simple resistance heating to higher value models (VALUE) with additional preventive diagnostic functions and advanced operator interfaces; from models for valve control with setpoint profiles that can be varied over time (PERFORMANCE) to versions with recorder functions and touch screen graphic display (MULTIFUNCTION).

All models offer advanced PID control algorithms and automatic tuning functions. Multifunction models also offer network connectivity and optional remote access.

SERVICES

A team of Gefran experts works with the customer to select the ideal product for its application and to help install and configure devices (customercare@gefran.com).

Gefran offers a wide range of courses at different levels for the technical-commercial study of the Gefran product range as well as specific courses on *demand*.



APPLICATIONS



PLASTIC



RUBBER



METAL



PHARMACEUTICAL



FOOD



PETROCHEMICAL



TEST BENCHES



WATER TREATMENT

SOFTWARE GF_eXpress

Configuration kit for Gefran instruments by means of PC (Windows environment). Lets you read or write all of the parameters of a single instrument via serial connection.

- A single software for all models
- Easy configuration
- Copy/paste, save recipe, trend functions
- Rapid configuration of instruments
- Saving and management of parameter recipes
- On-line trend and saving of historical data
- Recovery of factory settings
- Custom linearization
- On-line user manual
- Easy programming with custom messages
- Easy graphics programming with setpoint programmers



BASIC SERIES SIMPLICITY AND HIGH PERFORMANCE



Just a few parameters to adapt easily to standard industrial heating applications.

- Operator interface with double LED display
- Universal input for temperature sensors
- Heat and cool PID controls with automatic tuning
- 2 relay and/or logic outputs
- Loop Break alarm
- Dimensioni 1/16 DIN

VALUE SERIES COMPLETE FUNCTIONS



Four different models for a wide range of industrial temperature control applications.
Simplicity and practicality combine with experience and know-how in PID control.

- Operator interface with double LED display
- Universal input
- PID heat, cool and heat/cool controls with automatic tuning
- Total and partial load break alarms
- Loop Break alarm
- Up to four relay outputs, logic for SSR
- Analog control and retransmission output
- RS 485 serial communication in Modbus RTU
- 1/16, 1/8, 1/4 DIN and open frame

VALUE SERIES CONTROLLERS THAT SPEAK YOUR LANGUAGE



Innovative PID controllers and temperature programmers that offer precise control plus the widest, clearest, and most complete operator interfaces for all-around easy operation.

- Customizable alphanumeric messages that "speak to the operator" in his language
- Customizable colors, messages, logo
- Full and complete operator interface, at the top of its category in every format
- Easy configuration with Quick Configuration and help on line with scrolling messages
- Copy/paste parameters with Zapper(*), even in the field and without power supply
- Preventive diagnostics with counts of KWh and number of actuator operations
- Ready-to-use configurable logic functions
- Setpoint programmer and motorized valve positioner
- 1/16, 1/8, 1/4 DIN
- Zapper(*)
Battery-powered portable configurator

CONTROLLERS, PROGRAMMERS

PERFORMANCE SERIES ADVANCED CONTROLS



Advanced Controllers and Programmers to control machines and process lines.

Several models with various types of outputs and control algorithms to manage both electrical actuators and gas burners, proportional valves with or without feedback, processes with fixed or variable temperatures.

Galvanically isolated inputs and outputs guarantee a high level of immunity to noise, even in heavy-duty installations.

- Models V to control motorized valves with open/close commands
- Models P to manage variable setpoint profiles
- 1/16, 1/8, 1/4 DIN

MULTIFUNCTION SERIES HIGH DEMAND APPLICATIONS



Gefran's top line of controllers offers models with special functions to satisfy the demands of complex applications.

- 2500 Series for ultra-fast pressure and force controls
- Promer Graphic Series for generation of setpoint profiles for 4 zones, with built-in recorder function
- Looper Graphic Series for control of 16 independent zones, with built-in recorder function
- Ultra-compact GFXTHERMO4 series for PID control of 4 independent zones, with a complete range of Fieldbuses.
[^{*}]

FIELBUS (*)



CANopen DeviceNet

Modbus TCP/RTU

EtherNet/IP

EtherCAT

GEFRAN

BASIC SERIES	VALUE SERIES	PERFORMANCE SERIES			
SINGLE LOOP					
Double display	Double/Triple Display Controllers Valve controllers Programmers	Double display Valve controllers - Programmers			
					
1300	1350	1800	1800V	1800P	
					
1200	1250	1600	1600V	1600P	
					
450	600	650	800	800V	800P
					
	600 OF				
Cold, Plastics, Packaging, Laboratory furnaces, Chillers, Life Science			Furnaces, plants, process industry, test benches, laboratory equipment, life science		

CONTROLLERS, PROGRAMMERS

MULTIFUNCTION SERIES

SINGLE LOOP	MULTILOOP		
Triple display	LCD Display Graphic touch screen		
High speed - accuracy	Programmers with Data Logger	Controllers with Data Logger	
FIELDBUS*			
			169x120 mm
			96x96 mm (1/4 DIN)
			48x96 mm (1/8 DIN)
			48x48 mm (1/16 DIN)
			90x45x45 mm (Open frame)
Plastics, textile, process	Furnaces, heat treatments, climatic chambers, food, process heat		25x140x140 mm (DIN bar)

CONTROLLERS, PROGRAMMERS



 **PERFORMANCE**
 **MULTIFUNCTION**

800 / 800V / 800P
1600 / 1600V / 1600P
1800 / 1800V / 1800P
2500
PROMER
LOOPER
GFXTERM04

48x48mm (1/16 DIN)	48x96mm (1/8DIN)	96x96mm (1/4DIN)	96x96mm (1/4DIN)	96x96mm (1/4 DIN); 169x120mm	96x96mm (1/4 DIN); 169x120mm	25x140x140mm
1	1	1	1	4	16	4
X	X	X	X			
	X[V,P]	X[V,P]	X[2]	X	X	
				X	X	
				X	X	
4	5	5	6	6		
X	X	X	X	X	X	X
X	X	X	X	X	X	X
			X			
X	X	X	X	X	X	X
			X			
X	X	X		X	X	X
				X	X	X
X	X	X		X	X	X
X	X	X	X	X	X	X
X	X	X		X(1)	X(4)	X(16)
						X(4)
X(2)	X(2)	X(2)	X(8)	X(2)	X(8)	X(2)
X(4)	X(4)	X(4)	X(4)	X(6)	X(24)	X(6)
X(3)	X(2)	X(2)		X(8)	X(32)	X(8)
				X(4)	X(16)	X(4)
X(2)	X(2)	X(2)	X(3)	X(4)	X(16)	X(4)
X	X	X	X			
6	6	6	11	10	40	10

CONTROLLERS, PROGRAMMERS



PERFORMANCE			MULTIFUNCTION			
800 / 800V / 800P	1600 / 1600V / 1600P	1800 / 1800V / 1800P	2500	PROMER	LOOPER	GFXTERMO4
X	X	X	X	X	X	X
X	X	X	X	X	X	X
X	X	X	X	X	X	X
X (mod. V)	X (mod. V)	X (mod. V)	X	X	X	X
X (mod. V)	X (mod. V)	X (mod. V)		X		
X (mod. P)	X (mod. P)	X (mod. P)		X		
4	4	4		100		
16	16	16		300		
X (4)	X (4)	X (4)		X (2)	X (8)	X (2)
X	X	X		X		
X	X	X	X	X	X	X
X	X	X	X	X	X	X
X	X	X	X	X	X	X
			X			
				X	X	
				X	X	
X	X	X	X	X	X	X
			X			X
				X	X	X
					X	X
					X	X
X	X	X	X			X
				X	X	X
			X			X
X	X	X	X	X	X	X
X	X	X	X			
X	X	X	X	X	X	X
			X			
				X		
X	X	X	X	X	X	X
X	X	X	X	X	X	X
X	X	X	X	X	X	X

