



**Allen-Bradley**

# Pico GFX™

## Simple Control with HMI Functionality

### Pico GFX-70

**With its multi-function display, the new Pico GFX™ controller adds more flexibility and capability to the Pico family of Allen-Bradley controllers.**

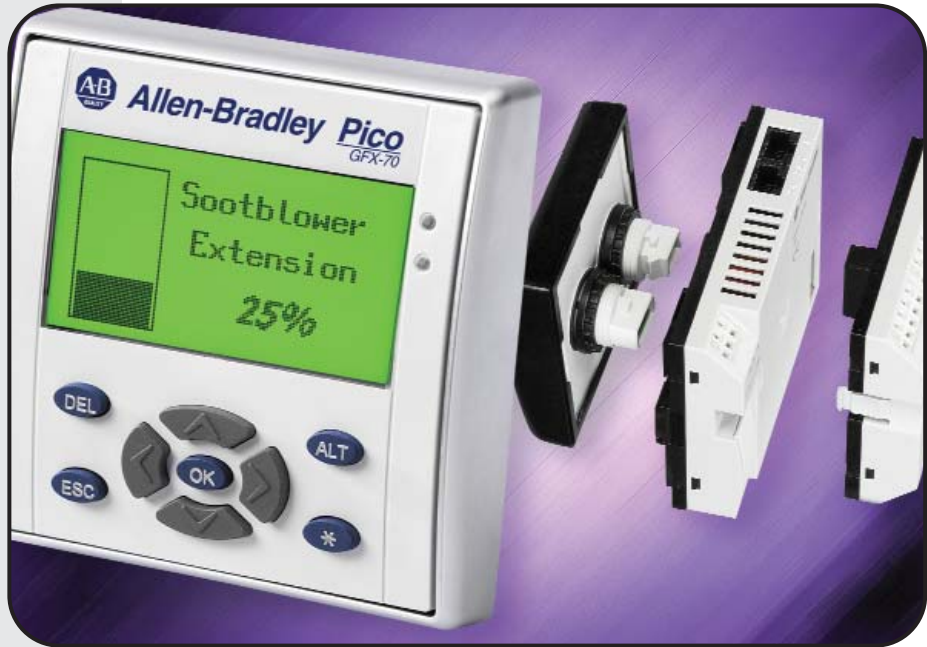
The GFX displays text, date, time, and even your own custom bitmaps. These graphics can be used as operator interface, or linked to control operations to provide real-time feedback. This controller offers an attractive and practical design with an IP65 display on the outside of your panel, and the controller and I/O conveniently housed within the panel. The 70 mm graphic display is backlit for readability. Even the keypad buttons are illuminated for use in low light conditions. The controller may also be attached to a DIN rail when the display unit is not required.

### Small. Simple. Flexible.

The new Pico GFX follows the same format as its Pico family members. Keep it small, simple, and flexible. Output text, message text or fault messages, graphics, pictures, operating instructions, date, time, and more. In addition, you can acknowledge fault messages, enter values, initiate actions, and more. Programming is performed via the use of the display buttons or with new PicoSoft Pro programming software.

### Applications

The new Pico GFX services existing Pico applications such as: Machine Control, Commercial Lighting, Agricultural, Vessel Control, HVAC Systems, and Packaging and Material Handling. In addition, the Pico GFX can be used for control functions such as speed and valve control, using new math instructions and embedded analog inputs and output.



The Small, Simple, and Flexible Pico GFX™

### Key Features

- Graphic display
- Modular design
- Analog and digital I/O
- Expandable to 272 points
  - With the use of current Pico expansion I/O modules
  - Connect up to eight units together from a distance of up to 1000m via its interconnecting peer-to-peer network)
- Ladder Logic programming with on-board keypad and/or PicoSoft Pro software
- Button lighting
- IP65 rating
- 10 Language Menu-Assistance
- Control with P, PI, and PID controllers
- Simple, tool-free installation in 22.5 mm mounting holes
- On-board data entry and programming with the display buttons
- New PicoSoft Pro software (for HMI and controller programming)
- Use a Bitmap file from the pre-existing library in PicoSoft Pro, or import your own

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*Product Profile*

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## Specifications

GFX-	DUB	DU	LDFC	LDF	IB12XOW4IF	12XOW4IOF	12XOB4IF	12XOB4IOF
Supply-voltage	Supply via GFX-LDF/LDFC		24 V DC		24 V DC			
Heat dissipation	3 W		3 W					
Inputs, digital	-	-	-	-	12	12	12	12
Inputs, analog, option. (0 – 10 V)*	-	-	-	-	4	4	4	4
Outputs, digital (R=relay T=transistor)	-	-	-	-	4 R	4 R	4 T	4 T
Outputs, Analog, (0 – 10 V) *	-	-	-	-	-	1	-	1
LC-Display	Yes	Yes	-	-	-	-	-	-
Keypad	Yes	-	-	-	-	-	-	-
Week-/Year timer	-	-	Yes/Yes	Yes/Yes	-	-	-	-
Continuous Current outputs	-	-	-	-	8:00 AM	8:00 AM	0,5 A	0,5 A
Degree of protection	IP 65		IP 20					
Interference suppression	EN 55011/55022 class B – IEC 61000-6-1;2,3,4							
Operating temperature/ Ambient temperature	-25 °C to + 55 °C LCD; legible from 0 °C to 55 °C							
Montage	Front installation, 2 x 22.5 mm standard		DIN 50022 top-hat rails or front		Installation on GFX.			

\*Two of the digital DC inputs can be alternately used as 0-10 V dc analog inputs.

[www.rockwellautomation.com](http://www.rockwellautomation.com)

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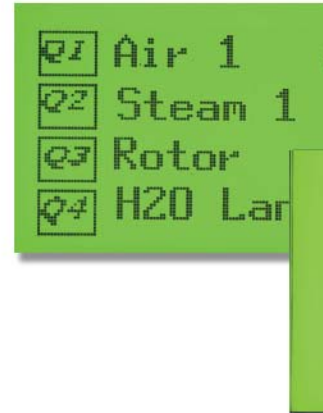
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## Control with HMI

The Pico GFX multi-function system features an integrated control device. The core of this is a nano controller with an extended range of function blocks such as PID controllers, signal smoothing and pulse width modulation function blocks, and many more. The processor allows 32-bit operations, which provide machine builders a wide range of solutions for complex closed-loop control tasks.

The visualization function allows users to create screens, for which the Pico GFX provides a number of tools and display elements that can be assigned different attributes. Possible elements include static texts, message texts, graphics, numerical value or date displays in different formats, value inputs or bit displays. The text management supports multi-lingual displays.

This form of language management is an example of a fully developed visualization system. All the variables of the control device are directly available for visualization and can be used for controlling display elements, for outputs, and for data inputs.



Choose between discrete and analog I/O offerings.

## Pico GFX expansion and Connectivity



Connect up to eight GFX controllers using the new GFX proprietary Pico-Link inter-connectivity network to provide more points of I/O and to peer into the process. Use this connectivity to access information/data from one processor to/from the others linked on the network. All processors can be accessed via one or more graphic display units. Giving users the ability to peer into the process.

Using the serial connection cable allows users to exchange and view data and programming from one Pico GFX controller to one other GFX controller.



Use the existing Pico expansion modules to increase I/O options

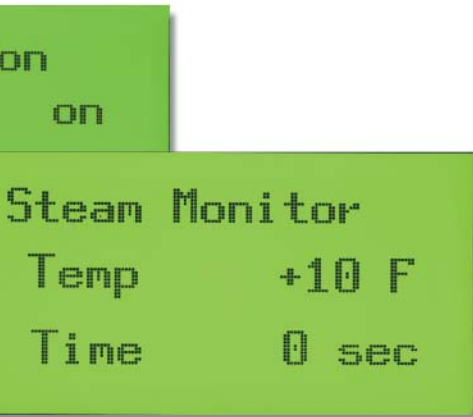


## Simple and Expansive Modularity



The Pico GFX is easily fitted using two standard 22.5 mm drill holes. The components for the power supply and the optional inputs/outputs simply snap on the back of the display. The processor can also be mounted to a panel or DIN rail for use without the HMI.

For additional expansion of I/O, the current line of Pico expansion modules can be used with the Pico GFX.



## PicoSoft Pro Software

The PicoSoft Pro application is a complete package: it enables users to create the control software, assign parameters to the function blocks used, configure the visualization interface, use all screens and button functions, and finally configure the entire project including the networking. As if that isn't enough, the software also offers functions for simulating the control program, documenting the project, and also for establishing communication between the PC and the controller. The user therefore only requires one software package and one interface on the computer in order to cover all the functions required.



## Accessories

The GFX accessories allow you to customize your GFX. Handle more tasks and/or upload-download applications by using the 1760-MM3 memory module. This module provides another 256 K of memory for the GFX controller. Other items include the programming cable, serial cable, PicoSoft Pro software, the protective membrane, and the protective cover.

