	Pico	Pico GFX-70		Pico	Pico GFX-70
Operating Power			Pico-Link		
120/240V ac	Х	Х	Number of Pico Link stations		8
24V dc	Х	Х	Pico-Link Baud Rate		10 KBits/s to 1000 KBits/s
12V dc	Х		Pico-Link Length, max.		1000 m (3280 ft)
нмі			Pico-Link Data Transfer, max.		32 double words
LCD Display	Х	Х	Function Blocks		
Text Display Feature	Х	Х	Timer	Х	Х
Text Display Screens, max.	8	255	Counter	Х	Х
Lines of Text			Analog Comparator	Х	Х
per Display Screen, max.	4	4	Operating Hours Counter	Х	Х
Text Length, max.	16 characters	Standard type size: 16 characters	7-Day Time Switch	Х	Х
		Double type size: 8 characters	Year Time Switch	Х	Х
		7-Segment display: 4 characters	Text Display	Х	Х
Display Languages	12	10	Master Reset	Х	Х
Keypad	Х	Х	Frequency Counter	Х	Х
Freely Definable Keys		5 (max. 31 functions per key)	High-Speed Counter	Х	Х
Graphics Display Feature		Х	Comparator	Х	Х
Graphics Display Capacity, max.		24 KB	Set Cycle Time	Х	Х
		max. 255 screens	Arithmetic Function		Х
		max. 255 elements per screen	Block Functions		Х
Integrated Status LEDs	1	2	Boolean Operation		Х
1/0			High-Speed Incremental Encoder		Х
Embedded I/O, max.	20	16	PID Controller		Х
I/O Count			Signal Smoothing Filter		Х
with Expansion Module, max.	40	36	GET/PUT Pico-Link Value		Х
Remote Expansion	using 1760-RM-PICO	using 1760-RIM-GFX or two GFX processors	Sychronize Clock via Pico-Link		Х
I/O Count			Value Scaling		Х
with Pico-Link, max.		272	Numerical Converters		Х
Digital Input Types	120V ac	120V ac	Pulse Width Modulation (PWM)		Х
	24V dc	24V dc	Value Limitation		Х
	12V dc		Certifications		
	24V ac or 24V dc		Degree of Protection	IP20	Display: IP65, NEMA 4X
Digital Output Types	24V	24V dc			Processor: IP20
	relay	relay	CE	Х	Х
Analog Input Types	0 to 10V	0 to 10V	UL, CSA	Х	Х
Analog Output Types		0 to 10V	Class I, Division 2		
Real Time Clock Programming	Х	with optional display (1760-DUB)	Hazardous Location	Х	Х
Keypad	Х		Operating Temperature Range		
Pre-programmed Memory Module	Х	Х	Controller Temperature Range	-25°C to 55°C	-25°C to 55°C
Picosoft Software	Х			(-13°F to 131°F)	(-13°F to 131°F)
Picosoft Pro Software	Х	Х	Display Temperature Range	n/a	-5°C to 55°C
Programming Rungs, max.	128	256			(23°F to 131°F)
			Storage/Transport Temperature	-40°C to 70°C	-40°C to 70°C
				(-40°F to 158°F)	(-40°F to 158°F)



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Pico Family of Controllers

Expanding your Options





Practical solutions that also control cost.

Small, simple and flexible across the line.

When you need simple control with a small footprint, The Allen-Bradley family of Pico controllers offers a practical solution that's easy on your budget. Performing simple logic, timing, counting, and real-time clock operations, the Allen-Bradley line of Pico controllers has now been expanded and enhanced. Whether you choose the advanced capabilities of the Pico GFX or the enhanced features of the Pico, the entire family provides you with more control options than ever.

More Pico selections for more applications.

For increased functionality, performance and value to you, the Pico GFX adds a graphic display while offering advanced programming features like PID control, high speed counters, and Boolean sequences. Falling between a timing relay and a basic PLC/smart relay, the Pico controllers are ideal for applications where simple control is required in addition to when cost and application flexibility are primary considerations.

The complete line of Allen-Bradley Pico controllers were designed with your ease-of-use in mind. Program and data adjustments are effortless via the on-board keypad and, or with PicoSoft and PicoSoft Pro configuration software. Furthermore, the simple programming style was designed to simulate familiar wiring diagram instructions. With the new DeviceNet slave communications module for use with the Pico family, you can now incorporate the Pico into your DeviceNet configuration.

Flexible mounting.

Depending upon your application needs, the Pico controllers can either be DIN rail or thru-panel mounted. Due to the modularity of the Pico GFX controllers, you can mount the GFX-70 display thru your panel to the processor and I/O on the other side via two 22.5mm button holes.

Easily programmed.

Pico controllers are easily programmed with either PicoSoft Pro software (for Pico GFX controllers, as well as backward-compatibility for standard Pico controllers) or PicoSoft software (for standard Pico controllers). It couldn't be simpler: the user requires only one software package and one interface on the computer in order to cover all the functions required.



TYPICAL APPLICATIONS

Pico and Pico GFX controllers are well suited for a number of applications such as:

- Machine control
- Commercial lighting
- Agricultural
- Vessel control
- HVAC systems
- Packaging and material handling
- Pumps
- Fans

In addition the Pico GFX can be used for control functions such as:

- Speed and valve control
- Employing new math instructions
- · Embedded analog inputs and output.



ESSENTIAL COMPONENTS. EXCEPTIONAL VALUE.

Allen-Bradley Pico controllers are part of the Essential Components/ Exceptional Value program, which offers the products you prefer at the prices you demand.

The future of the nano-controller is here.

The standard is set higher.



The most capable Pico ever.

With its graphical, multi-function display and options for inter-connectivity, the Pico GFX represents the future of nano-controllers. It leads the Pico family of controllers in flexibility and capability.

Expanded control, simple HMI.

At its core, the Pico GFX 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 tasks. The HMI design of the Pico GFX enables it to display 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. Attractive and practical, the Pico GFX features a 70 mm, IP65 display mounted on the outside of your panel, with the controller and I/O conveniently housed inside.

Get connected with Pico GFX.

Connect up to eight GFX controllers using the new GFX proprietary Pico-Link inter-connectivity network. It provides you more points of I/O and allows you to peer into the process. Take advantage of this connectivity to exchange information and data from one processor to the others on the network.

You can access all processors via one or more graphic display units. Use the Pico GFX as a DeviceNet slave with the new 1760-DNET communications slave module.

Modularity.

Configure the Pico GFX to suit your applications: specify with or without a display; choose a processor with or without communications; select from three processors and five I/O modules. The components for the power supply and the optional inputs/outputs simply snap on the back of the display. The processor can connect to the HMI through two 22.5 mm holes, or to standard DIN-rail. Use either two GFX processors or one GFX processor and one Remote Mount Processor to connect to

the HMI for remote display configurations.

PICO GFX FEATURES

Powerful and packed with features, the Pico GFX takes nano-controllers to the next level.

- Graphic display
- Modular design
- Analog and digital I/O
- Ladder logic programming with on-board keypad and/or Picosoft Pro software
- Backlit display,
- illuminated keypad
- IP65 rating
- 10 language menu assistance

- Simple, tool-free installation
- New PicoSoft Pro software
- or import your own
- Expandable to 272 I/O points with use of current Pico expansion I/O modules and Pico-Link
- distance of up to 1000m via the Pico-Link network

The smart choice.

Is it a PLC or is it a smart relay? You get to decide as you learn about the standard Pico family of controllers as the small, simple and flexible controller that meets the needs of a wide variety of applications. Now improved and enhanced, the Pico line provides you with even more versatility. Basic operations today require controls with some intelligence. Smart devices continue to reduce engineering and application costs while becoming more compact. As applications evolve, the revised Pico family offers you more control solutions at the same price as always. This gives you an essential component at an exceptional value

PICO FEATURES

Series B Pico controllers are right for basic applications that require complete, flexible solutions.

- Small size
- Performs basic PLC functions such as logic, timing and counting
- No programming software to purchase
- 16 character text messages
- Real-time clock
- Analog inputs
- Relay outputs
- 128 lines of logic
- 32 markers
- 16 function blocks





- Use bitmap files from library
- Connect up to 8 units from a

Do more with Pico.

Execute more instructions with the Pico Series B controllers. They offer faster processor speeds and an expanded memory, resulting in three times the ladder logic capacity and twice the number of function blocks than previously available. The new line of controllers provides you with features such as backwards-compatible programming, text messaging on the 12-point processor and additional power supply options such as the 12- and 18-point 24V ac processors. Along with an increased breadth of on-board I/O configuration options, the Pico Series B line of controllers include an increased retentive memory range, additional coil functions, and enhanced clock and seasonal time configurations.





When you want flexible I/O expansion options.

You may have several different types of applications where the Pico controllers can be used. The Pico expansion I/O modules provide you with flexible choices that allow you to purchase the I/O count you need for a variety of applications. It is simple for you to expand the 18- and 20-point and GFX processors with any one of the available Pico expansion I/O modules. Select between the 2- or 6-point AC Relay outputs and the 8-point DC transistor outputs modules that you can use with AC or DC processors.

Complete the package.



PicoSoft Pro.

For Pico GFX controllers, as well as backward-compatibility for standard Pico controllers. The PicoSoft Pro application supplies you with one program for programming ladder logic and visualization in one complete package. It enables you 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. Furthermore, the software also offers functions for simulating the control program, documenting the project and also for establishing communication between the PC and the controller.



PicoSoft.

For standard Pico controllers. Friendly and versatile, PicoSoft enables you to create, simulate, and download your program from a PC to the Pico controller. Save time and archive more complex programs while enjoying the intuitive and user-friendly GUI interface. The Help menu provides access to animated user guides that give step-by-step instructions. Program simulation is simple and familiar while offering you several programming display formats: Device, IEC or ANSI/CSA.

Accessories

Pico GFX:

- Memory module-an additional 256K
- Serial cable and Pico-Link cable
- Protective keyboard membrane
 and protective cover
- Remote Mount Processor*

Pico:

- Memory module
- PC-to-Pico interface cable
- Input/Output simulator
- DeviceNet module*
- Remote Mount Processor*





* The DeviceNet module and the Remote Mount Processor can be used for both

to the Remote Mount Processor (PICO or GFX).

the Pico and Pico GFX. Users must specify which Pico controller they are connecting





Allen-Bradie

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Pocket with bleed

