



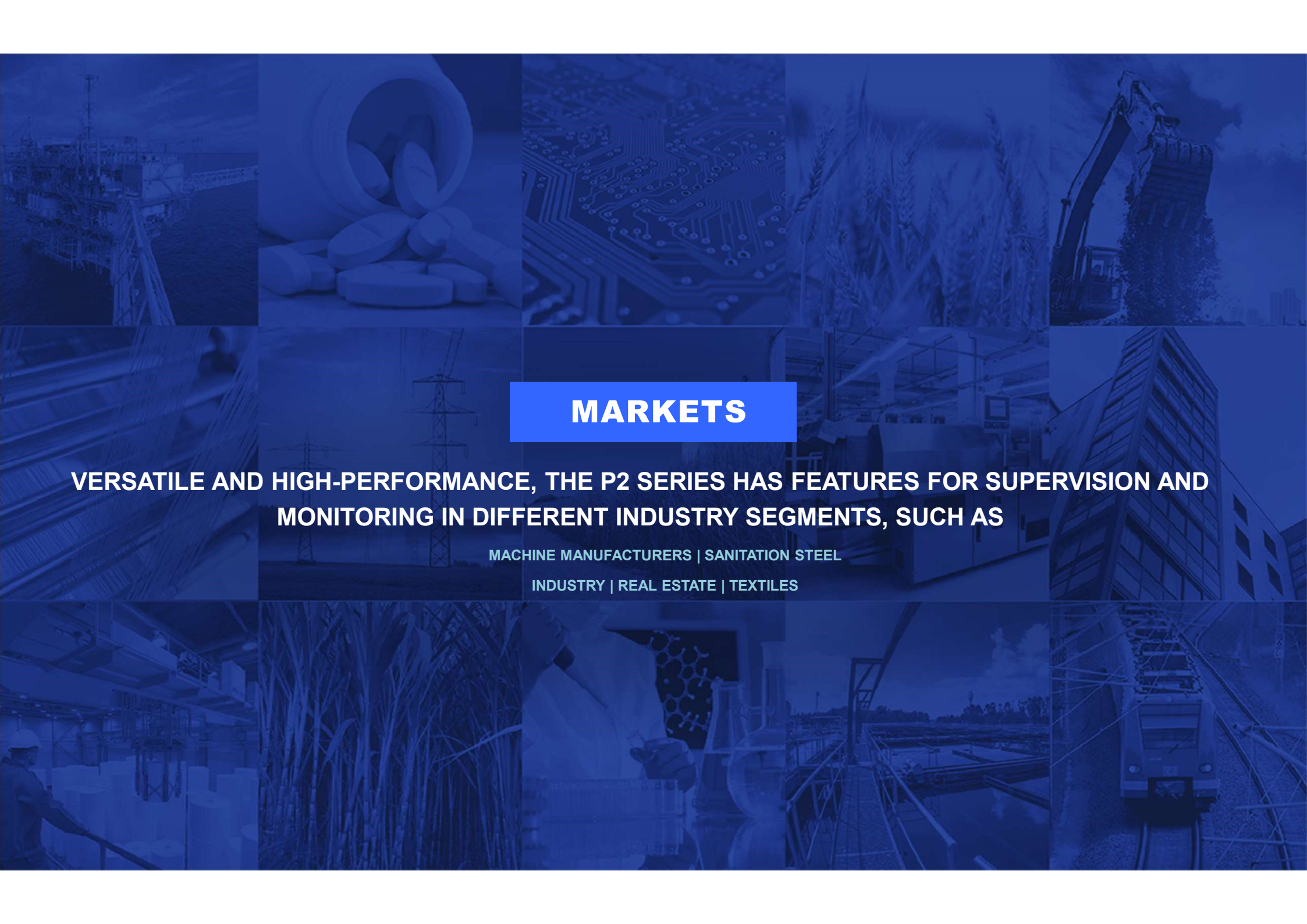
P2 SERIES

**SPEED AND ECONOMY
FOR YOUR APPLICATION**

P2 SERIES

- Ideal solution for industrial applications that use operation and visualization terminals
- Innovative and intuitive features, combining advanced graphic tools and a selection of highly functional features
- High-performance hardware, superior and advanced graphics solution through FvDesigner software





MARKETS

VERSATILE AND HIGH-PERFORMANCE, THE P2 SERIES HAS FEATURES FOR SUPERVISION AND MONITORING IN DIFFERENT INDUSTRY SEGMENTS, SUCH AS

MACHINE MANUFACTURERS | SANITATION STEEL
INDUSTRY | REAL ESTATE | TEXTILES

MODELS

- The P2 Series is available in 7 models, allowing you to choose the best solution for your needs:

P2043NA

- Widescreen color display
- Touchscreen
- 4.3" LCD-TFT
- 1x RS-232, 1x RS-422/485
- **1x Ethernet port 10/100 BASE-T**
- USB interface (1 Host and 1 Device)

P2070NA

- Widescreen color display
- Touchscreen
- 7" LCD-TFT
- 1x RS-232, 1x RS-422/485
- **1x Ethernet port 10/100 BASE-T**
- USB interface (1 Host and 1 Device)

P2101NA

- Widescreen color display
- Touchscreen
- 10,1" LCD-TFT
- 1x RS-232, 1x RS-422/485
- **1x Ethernet port 10/100 BASE-T**
- USB interface (1 Host and 1 Device)

P5150ZB

- Widescreen color display
- Touchscreen
- 15" LCD-TFT
- 1x RS-232, 1x RS-422/485
- **1x Ethernet port 10/100 BASE-T**
- USB interface (1 Host and 1 Device)

P2043SA

- Visor colorido widescreen
- Touchscreen
- 4,3" LCD-TFT
- 1x RS-232, 1x RS-422/485
- Interface USB (1 Host e 1 Device)

P2070SA

- Visor colorido widescreen
- Touchscreen
- 7" LCD-TFT
- 1x RS-232, 1x RS-422/485
- Interface USB (1 Host e 1 Device)

P2101SA

- Visor colorido widescreen
- Touchscreen
- 10,1" LCD-TFT
- 1x RS-232, 1x RS-422/485
- Interface USB (1 Host e 1 Device)



KEY FEATURES

The main features of the P2 Series are:

- Open platform that allows you to improve the look and functionality of applications
- High-performance hardware 10/100 BASE-T Ethernet communication interface (P2043NA, P2070NA, P2101NK, and P5150ZB)
- RS-232, RS-422/485, and USB serial communication interfaces
- Long-lasting backlight
- TFT technology for brightness adjustment and high contrast
- Widescreen display with 30% larger usable area
- Solid features that develop and ensure user confidence
- Time optimization with intuitive and versatile editing tools
- Several templates for creating complex and customized applications quickly and easily
- Online and offline simulation, with or without the terminal, allows for reliable testing before going into the field
- Tropicalization / Conformal Coating
- Possibility of incorporating a PLC on the rear
- Remote access (VNC)



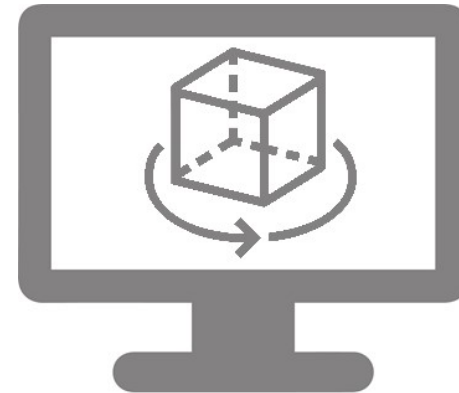
GENERAL FEATURES



GENERAL FEATURES

SUPERIOR GRAPHICS PROCESSING

- Open and versatile, HMIs feature scalable vector graphics, allowing users to import external objects and components
- The combination of a high-performance processor and advanced development software provides everything you need to bring your application closer to reality.



GENERAL FEATURES

HIGH-PERFORMANCE HARDWARE

- The P2 series hardware allows the product to stand out for its engineering and design
- Its advanced features enable quick responses to field use and superior connectivity for data acquisition with automation systems
- The high protection rating (IP) of the P2 Series Human-Machine Interfaces allows them to be used in more severe environments



GENERAL FEATURES

EXCELLENCE IN DISPLAYS AND TOUCHSCREENS

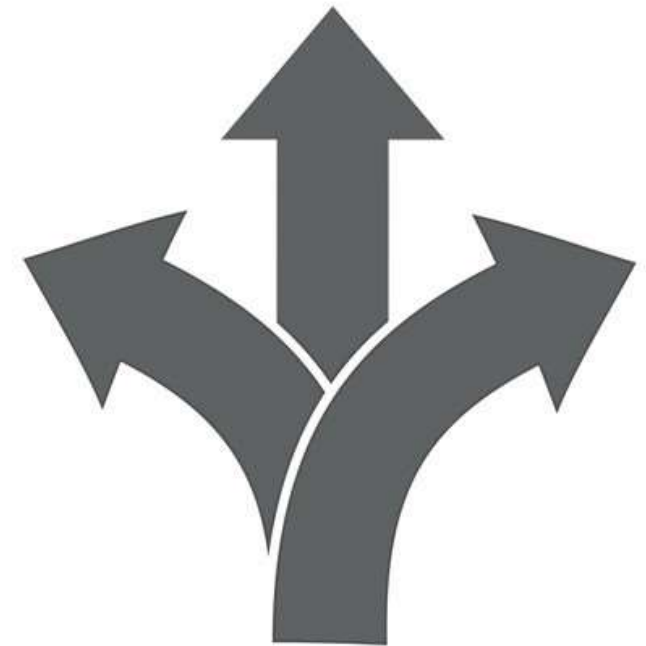
- The screens and touchscreen devices are unique features of the P2 Series, as they allow for quick interactions with the system and have a long service life
- Completely flat displays, ensuring a dust-free surface and facilitating viewing even in harsh environments
- Equipped with long-lasting backlights, the products also feature TFT technology, which adjusts screen brightness
- Widescreen format that further expands the possibilities for applications with visually complex screens



GENERAL FEATURES

VERSATILE AND PRACTICAL

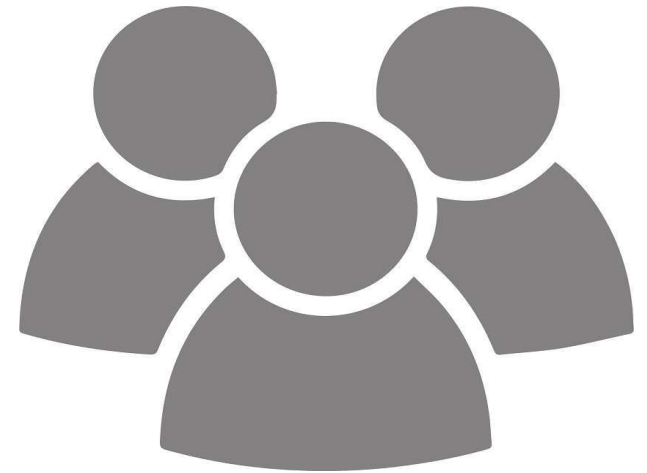
- Developed for applications that demand high operational reliability and excellent visual features
- Even in compact formats, the P2 Series HMIs can be used both in industrial processes and by machine manufacturers and in manufacturing automation
- Ideal for the interface between the operator and the automation system, reducing project costs and increasing machine life



GENERAL FEATURES

USER AND RIGHTS MANAGEMENT

- With this feature, different permission levels can be created for user groups
- The developer determines what each user can do in the system and their restrictions
- It is possible to generate, for example, logins for creating and deleting recipes (administrator) or for reading machine recipes (operator)



GENERAL FEATURES

SIMULATION

- The programming tool is available for users to test the functionality of their application
- With it, customers can simulate, debug, and evaluate their project before it is sent to the hardware
- This allows errors to be anticipated in the planning and specification stages, reducing the risk of failure in engineering projects



TECHNICAL SPECIFICATIONS



TECHNICAL SPECIFICATIONS

P2 SERIES

	P2043NA	P2043SA	P2070NA	P2070SA	P2101NA	P2101SA	P5150ZB
Screen size	4,3"		7"		10,1"		15'
Screen resolution	480x272		800x480		1024x600		1024x768
Display	LCD-TFT						
Screen colors	16,7M						16,2M
Backlight type	LED						
Backlight lifespan	20.000h						50.000h
Touchscreen	Resistive						
Flash memory	128MB						256 MB
RAM memory	128MB						256 MB

TECHNICAL SPECIFICATIONS

P2 SERIES

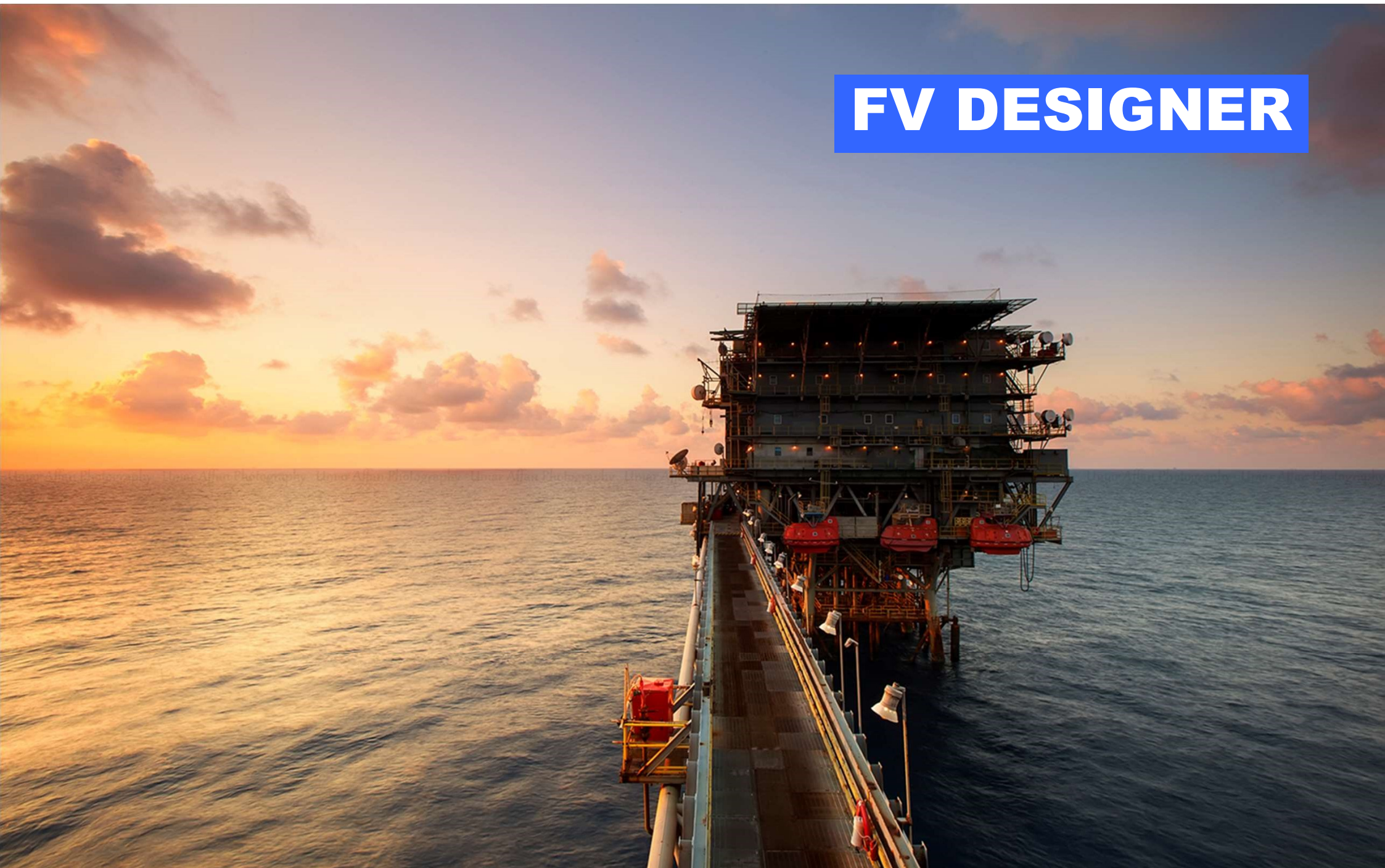
		P2043NA	P2043SA	P2070NA	P2070SA	P2101NA	P2101SA	P5150ZB
Real-time clock		Yes						
Communication port	COM1	RS-232						
	COM2	RS-422 / RS-485						-
	COM3	-						RS-422 / RS-485
	COM4	-						RS-485
USB 2.0 Port		1 Host, 1 Device Mini-USB (programming)						
10/100 BASE-T Ethernet port		Yes	No	Yes	No	Yes	No	Yes
Front Panel (WxHxD)		128x102x36,4mm		201x147x38,1mm		271,5x213,5x44,6mm		357 x 283 x 52,5 mm
Panel cutout dimensions (WxH)		118,5x92,5mm		191,5x137,5mm		259,5x201,5mm		348 x 274 mm
Supply voltage		10,5 – 28Vdc		24Vdc ± 20%		10,5 – 28Vdc		14 - 32 Vdc

TECHNICAL SPECIFICATIONS

P2 SERIES

	P2043NA	P2043SA	P2070NA	P2070SA	P2101NA	P2101SA	P5150ZB
Maximum power dissipation	6W	5,5W	7,5W	7W	8W	7,5W	20W
Front protection	IP65						
Rear protection IP20	Yes						
Operating temperature	0 to 50°C						
Storage temperature	-20 to 60°C						
Humidity without condensation	10 to 90%, at 40°C						
Weight	235g	215g	570g	550g	1300g	1280g	3165g
Certifications	CE, UL						
Tropicalization / Conformal Coating	Yes						
Possibility of PLC (rear)	Yes, one CPU 14MB	No	Yes, at most one CPU 24MB + 2 modules		Yes, at most one CPU 24MB + 4 modules		Yes, maximum one CPU 24MB +5 expansion modules

FV DESIGNER



FV DESIGNER

PROGRAMMING SOFTWARE

The P2 Series operation terminals are programmed using FvDesigner software.

The tool has new features, provides a wide range of objects and functions, with a simulator, and allows users to develop their applications without needing to communicate with the terminal during programming.



SOFTWARE FEATURES

SOFTWARE FEATURES

P2 SERIES

	P2043NA	P2043SA	P2070NA	P2070SA	P2101NA	P2101SA	P5150ZB
Network functions	Sending emails (SMTP client) Transferring files via FTP						
Ladder View	No		Yes (only when using FBs and HB1)				
Multilingual applications	Yes						
Passwords	Yes						
Alarms	Yes						
Datalogger	Yes						
Trend Chart	Yes						
Timing Functions	Yes						
Script	Yes						
Remote Access (VNC)	Yes						
Audit Trail	No						Yes

COMMUNICATION DRIVERS

COMMUNICATION DRIVERS

P2 SERIES

Manufacturer	Series/Protocol	
Altus	FACON	Serial
		TCP
		UDP
	MODBUS RTU/TCP	Serial
		Ethernet
Allen-Bradley	CompactLogix	Ethernet
	MicroLogix	Ethernet
		Serial
	SLC	Ethernet
		Serial
Barcode Reader	Serial	
	USB	

Manufacturer	Series/Protocol	
Beckhoff	Twincat	Ethernet
Delta	AH500	
	DVP	
Hitachi	EHV	Serial
		Ethernet
Keyence	KV-L21V/3000/5000/5500	Serial
	KV-3000/5000/5500/7500	Ethernet
Koyo	Direct	Serial
Modbus	Master	RTU
		ASCII
		TCP

COMMUNICATION DRIVERS

P2 SERIES

Manufacturer	Series/Protocol	
Mitsubishi	FX-2N	Serial
	FX-2N 485BD module	Serial
	FX-3U/3G	Serial
	FX-3U/3G Adapter module	Ethernet (ASCII/Binary)
	FX-5U	Serial
		Ethernet (ASCII/Binary)
	Q Series Serial Communication (Link Port)	Serial (3C-format1/4)
	Q/L Series Ethernet	Ethernet (ASCII/Binary)
	Q Series CPU Direct (CPU Port)	Serial

Manufacturer	Series/Protocol	
Omron	CP (FINS)	Serial
	CP1L (FINS)	Serial
	CP1L (FINS/TCP)	Ethernet
	CS/CJ (FINS)	Serial
	CS/CJ (FINS/TCP)	Ethernet
	CPM (HOSTLINK)	Serial
	Omron Ethernet	Ethernet
	NJ (FINS/TCP)	Ethernet
	NX/NJ (FINS/UDP)	Ethernet
	NX1 (Ethernet IP)	Ethernet

COMMUNICATION DRIVERS

P2 SERIES

Manufacturer	Series/Protocol	
Panasonic	FP	Serial
		Ethernet
Schneider	Modbus RTU/TCP	
Siemens	S7-200 SMART	Serial
		ISO TCP
	S7-200 (PPI: 1-to-1)	Serial
	S7-1200	Ethernet
	S7-300 MPI *	Serial
	S7-1500	Ethernet
Taie	FY	Ethernet
		Taie
		RTU

Manufacturer	Series/Protocol	
User-Defined Protocol	Binary/ASCII	
Vigor	VH Series	Serial
	VS Series	Serial
Xinje	XC Series	Serial
	XD Series	Serial
Yaskawa	Extended MEMOBUS	
	MP Series Extension	Ethernet
Yudian	Yudian AIBUS	Serial

*Siemens S7-300 MPI: This communication driver is only available on P2xxxxA models, requiring the inclusion of the HEM-MPI accessory, which is inserted into the rear of the HMI (as is done with expansion modules).

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