

# Product Guide

2014

Touch Operator Interface

Industrial Flat Panel Monitor

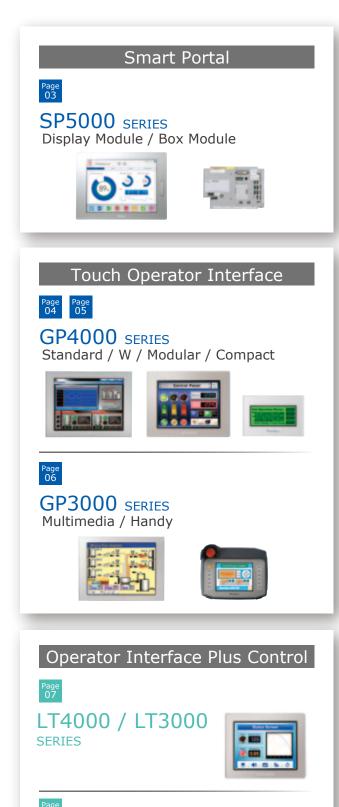
Operator Interface Plus Control

Software

Industrial PC



# Contents





# Industrial Flat Panel Monitor FP3000 SERIES



GP3000

SERIES Control

# Pro-face 2014 New face: SP5000series

# SMART PORTAL



Connecting information and people for optimal communication

# Valuable information in the right format



Having more information is not necessarily better than having less. Value is created when the right information reaches the right people in the right format.

# Bring your factory closer to your office



By segmenting the network, SMART PORTAL makes it possible to connect factories and offices while ensuring the highest security.

# Simple to use —any time, any place



Overseas production and the diversification of market needs have increased the need for efficient machine setup and maintenance.



## Smart Portal: SP5000 SERIES

Display X Box module design provides flexible functionality and size.









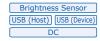
#### SP-5700TP

- 16 million colors TFT
- 1,024 × 768 pixels (XGA)
- Resistive Film (analog, multi-touch)
- Auto Scaling
- Color Variation



#### SP-5600TP

- 16 million colors TFT
- 1,024 × 768 pixels (XGA)
- Resistive Film (analog, multi-touch)
- Auto Scaling
- Color Variation



#### SP-5600WA

- 262,144 colors TFT
- 1,280 × 800 pixels (WXGA)
- Resistive Film (analog)
- Color Variation

Brightness Sensor		
USB (Host)	USB (Device)	
DC		

#### SP-5500TP

- 16 million colors TFT
- 800 × 600 pixels (SVGA)
- Resistive Film (analog, multi-touch)
- Auto Scaling
- Color Variation

















#### SP-5500WA

- 262,144 colors TFT
- 1,280 × 800 pixels (WXGA)
- Resistive Film (analog)
- Color Variation



#### SP-5400WA

- 262,144 colors TFT
- 800 × 480 pixels (WVGA)
- Resistive Film (analog)
- Color Variation

Brightness Sensor
USB (Host) USB (Device
DC

#### SP-5B40

- Data Backup 320 KB
- Application 64MB (Screen Size)
- Application approx. 5GB (Free Space)

Ethernet 2ch
COM 2 ch
AUX 1ch DVI-D 1ch
Audio Input 1ch
USB (Host) 3ch USB (Device) 1ch
DC

#### SP-5B10

- Data Backup 320 KB
- Application 64MB (Screen Size)
- Built-in Control Program

Ethernet 2ch	
COM 2 ch	
AUX 1ch DVI-D 1ch	
Audio Input 1ch	
USB (Host) 2ch USB (Device) 1ch	
DC	

#### 12 Combinations

#### Premium Display High performance display

supports multi-touch operation and provides brightness sensor and auto-scaling.



#### Open Box

Able to run a variety of Windows applications on

(equipped with HMI Runtime standard)

#### Advanced Display

The wide-screen display can display a large amount of information.



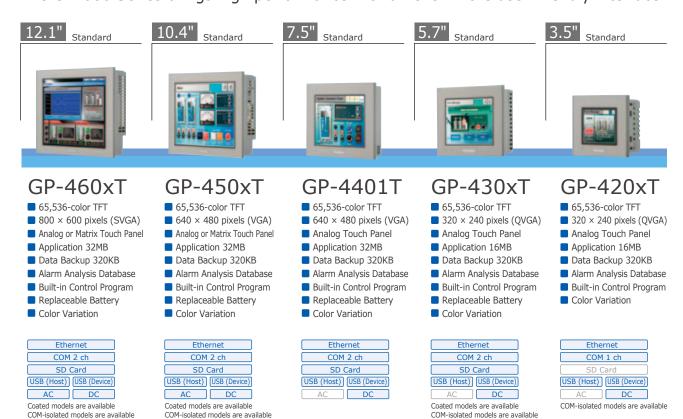
#### Power Box

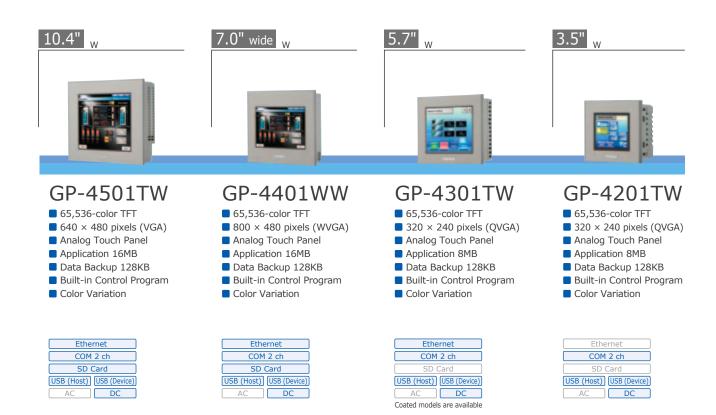
Solid box achieves high-speed processing and fast display.

http://www.proface.com/product/smart\_portal/sp5000.html

## Touch Operator Interface: GP4000 SERIES

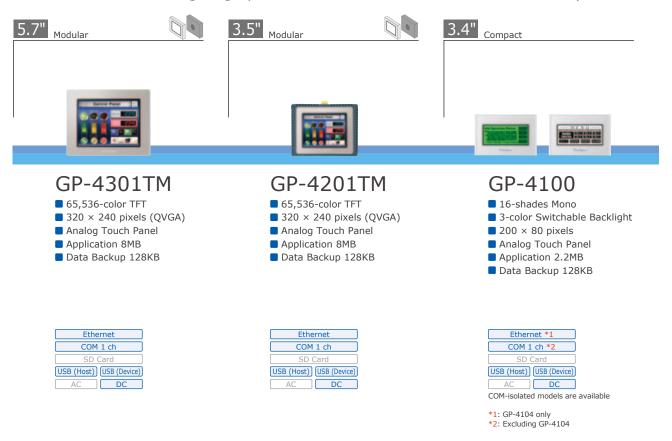
The GP4000 Series brings high performance with an even more user-friendly interface.



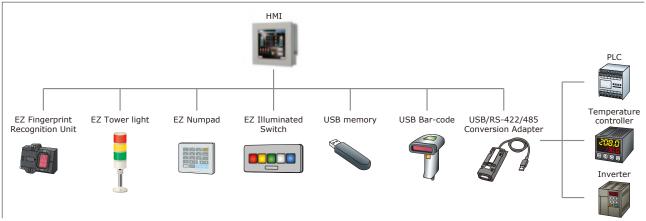


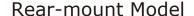
# Touch Operator Interface: GP4000 SERIES

The GP4000 Series brings high performance with an even more user-friendly interface.



#### Easily connect multiple USB devices





#### Color Variation









Silver Off-N PANTONE 8401C PAN

Off-white PANTONE Cool Gray 1C

PANTONE 7535C

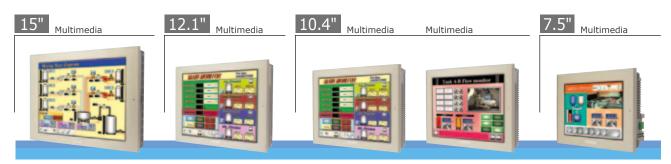
Black PANTONE 432C





# Touch Operator Interface: GP3000 SERIES

The GP3000 Series is available in a wide variety of sizes from 5.7" to 15".



#### GP-3750T

- 65,536-color TFT
- 1,024 × 768 pixels (XGA)
- Analog Touch Panel
- Application 16MB\* \*10MB when the Event Recorder Function is in use.
- Data Backup 320KB
- Built-in Control Program

#### GP-3650U/T

- 65,536-color TFT GP-3650U is ultra high-brightness model
- 800 × 600 pixels (SVGA)
- Analog Touch Panel
- Application 10MB ■ Data Backup 320KB
- Built-in Control Program

#### GP-3560T

- 65,536-color TFT
- 800 × 600 pixels (SVGA)
- Analog Touch Panel
- Application 10MB
- Data Backup 320KB ■ Built-in Control Program

### GP-3550T

- 65,536-color TFT ■ 640 × 480 pixels (VGA)
- Analog Touch Panel
- Application 10MB
- Data Backup 320KB
- Built-in Control Program

#### GP-3450T

- 65,536-color TFT
- 640 × 480 pixels (VGA)
- Analog Touch Panel
- Application 10MB
- Data Backup 320KB
- Built-in Control Program

Ethernet			
COM 2 ch			
Expansion	n Unit I/F		
Video Mix Unit I/F			
USB (Host) CF Card			
Video In Sound In			
AC DC			
Coated models are available			







Ethe	Ethernet		
COM	COM 2 ch		
Expansion	Expansion Unit I/F		
Video Mix Unit I/F			
USB (Host)	CF Card		
Video In	Sound In		
AC DC			
Coated models are availa			



#### GP-3360T

- 65,536-color TFT
- 640 × 480 pixels (VGA)
- Analog Touch Panel
- Application 8MB

- Data Backup 320KB
- Built-in Control Program

#### GP-3300U

- 65,536-color TFT
- Ultra high-brightness model ■ 320 × 240 pixels (QVGA)
- Analog Touch Panel
- Application 6MB
- Data Backup 320KB
- Built-in Control Program

#### GP-3310HT

- 65.536-color TFT
- 640 × 480 pixels (VGA)
- Analog Touch Panel
- Application 8MB
- Data Backup 320KB

#### GP-3300HS

- 4,096-color STN
- 320 × 240 pixels (QVGA)
- Analog Touch Panel
- Application 6MB Data Backup 320KB
- 16-shades Mono
  - 320 × 240 pixels (QVGA)

**GP-3300HL** 

- Analog Touch Panel
- Application 6MB
- Data Backup 320KB

Ethernet			
COM 2 ch			
Expansion Unit I/F			
Video Mix Unit I/F			
USB (Host) CF Card			
Video In Sound In			
AC	DC		

Ethe	Ethernet		
COM 2 ch			
Expansion Unit I/F			
Video Mix Unit I/F			
USB (Host)	CF Card		
Video In	Sound In		
AC	DC		

Ethernet			
COM 1 ch			
Expansion Unit I/F			
Video Mix Unit I/F			
USB (Host) CF Card			
Video In	Sound In		
AC	DC		

Ethernet		
COM 1 ch		
Expansion Unit I/F		
Video Mix Unit I/F		
USB (Host) CF Card		
Video In	Sound In	
AC.	DC	

Ethe	Ethernet			
COM	COM 1 ch			
Expansion	Expansion Unit I/F			
Video Mix	Video Mix Unit I/F			
USB (Host)	CF Card			
Video In	Sound In			
AC	AC DC			



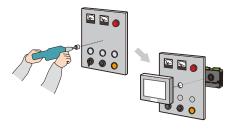
# Operator Interface Plus Control: LT4000M/3000series

#### Controllers with touch operator interface



#### LT4000M Series feature: All-in-one Unit

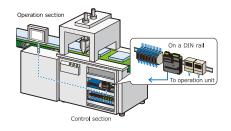
All-in-one design makes it easy to keep equipment compact and allows installation in a  $\phi$ 22 mm hole for easy panel mounting.\* Easily troubleshoot equipment by replacing the display unit or the control unit.



\* The 22mm hole is the standard size used for buttons or lamps.

#### LT4000M Series feature: Flexible Installation

Use a separation cable\* to install the control unit on a DIN rail and the operation unit in a different location. Operation unit is space- saving, and it allows you to install flexibly even where it is difficult to install due to limitations of space.



\* 3m and 5m cables are available.



### Operator Interface Plus Control: GP3000series Control Class

#### Fusion of touch operator interface and control functions



#### I/O Expansion Unit







	EX Expansion Module		CANopen Remote I/O	FLEXNETWORK Remote I/O
Master	_		CANopen Master	_
Input	8-point Input	16-point Input	_	32-point Input
Output	8-point Relay Output, 8-point Sink Output, 8-point Source Output	16-point Relay Output, 16-point Sink Output, 16-point Source Output	_	_
Input/ Output	4-point Input/ 4-point Output, 16-point Input/ 8-point Relay Output		CANopen Slave HTB (12-point Input/ 2-point Source Output/ 6-point Relay Output)	16-point Input/ 16-point Output, 32-point Input/ 32-point Output
Analog	2-ch Analog Input, 2-ch Analog Input/ 1-ch Analog Output, 4-ch Analog Input/ 2-ch Analog Output	1-ch Analog Output, 2-ch Analog Output	_	2-ch Analog Input, 2-ch Analog Output
Temperature	2-ch Thermocouple Pt100 Input/ 1-ch Analog Output, 4-ch Voltage, Current, Pt100/ Pt1000/ Ni100/ Ni1000 Input, 8-ch Temperature Pt100/ Pt1000 Input		_	-



### Industrial PC: PS4000/PE4000Bseries

#### **Industrial PC**









#### PS-4800

- 1,280 x 1,024 pixels (SXGA) Intel® Core™ 2 Duo P8400 2.26GHz or
- Windows® XP, 7, Embedded

Intel® Atom™ N270 1.6GHz

- HDD, SSD or CF card-selectable
- Fanless model is available

Ethernet 2 ch	
COM 2 ch	
USB 5 ch	CF Card
PCI 1 ch or none	
PCIe 1 ch or none	
DVI-I	
AC	DC

#### PS-4700

- 1,024 x 768 pixels (XGA)
- Intel® Core™ 2 Duo P8400 2.26GHz or Intel® Atom™ N270 1.6GHz
- Windows® XP, 7, Embedded
- HDD or SSD CF card-selectable
- Fanless model is available
- Stainless model is available

Ethernet 2 ch	
COM 2 ch	
USB 5 ch CF Card	
PCI 1 ch or none	
PCIe 1 ch or none	
DVI-I	
AC DC	

#### PS-4700 (Z510 model)

- 1,024 x 768 pixels (XGA)
- Intel® Atom™ Z510 1.1GHz
- Windows® Embedded
- CF card
- Fanless model only
- Stainless model is available

Ethernet 1 ch	
COM 1 ch	
USB 3 ch CF Card	
PCI	
PCIe	
DVI-I	
AC	DC

#### PS-4600

- 1,024 x 768 pixels (XGA)
- Intel® Core™ i3-3217UE 1.60 GHz or Intel® Celeron® M 827E 1.40 GHz
- Windows® XP, 7, Embedded
- HDD, SSD or CFast-selectable
- Fanless model is available

Ethernet 2 ch	
COM 2 ch	
USB 5 ch CFast	
PCI 1 ch or 2 ch or none	
PCIe 1 ch or none	
DVI-I	
AC DC	



#### Built-in







#### PS-4600 Rear Mount Model PS-4000B

- 1,024 x 768 pixels (XGA)
- Intel® Core™ i3-3217UE 1.60 GHz or Intel® Celeron® M 827E 1.40 GHz
- Windows® XP, 7, Embedded
- HDD, SSD or CFast-selectable
- Fanless model is available

- Intel® Core™ 2 Duo P8400 2,26GHz or Intel® Atom™ N270 1.6GHz
- Windows® XP, 7, Embedded
- HDD, SSD or CF card-selectable
- Fanless model is available

#### PE4000B N2600 Model

- Intel® Atom™ Dual Core N2600 1.6 GHz
- Windows® 2009, WES7
- SSD or CFast-selectable Fanless model only

#### PE4000B N270 Model

- Intel® Atom™ N270 1.6 GHz
- Windows® 2009
- CF card
- Fanless model only

Ethernet 2 ch	
COM 2 ch	
USB 4 ch CFast	
PCI 1 ch or 2 ch or none	
PCIe 1 ch or none	
DVI-I	
AC DC	

Ethernet 2 ch	
COM 2 ch	
USB 5 ch CF Card	
PCI 1 ch or 2 ch	
PCIe 1 ch or 3 ch or none	
DVI-I	
AC DC	

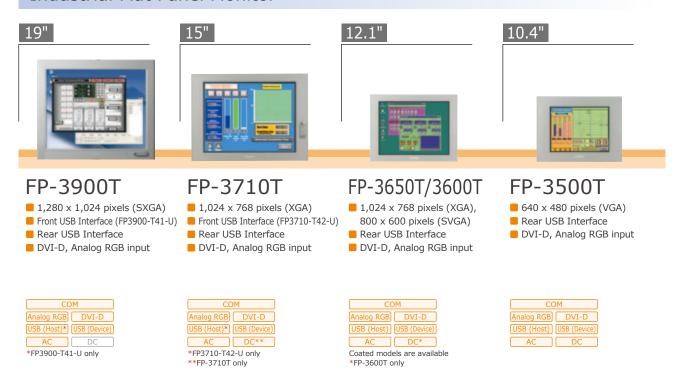
Etherr	Ethernet 3 ch	
COM 6 ch		
USB 5 ch	CFast	
PCI		
PCIe		
RGB	HDMI	
AC	DC	

Ethernet 1 ch	
COM 2 ch	
USB 2 ch CF Card	
PCI	
PCIe	
RGB	HDMI
AC	DC



### Industrial Flat Panel Monitor: FP3000 SERIES

#### **Industrial Flat Panel Monitor**



Regarding the acquisition of the international safety standards, visit Pro-face website.

#### WinGP - HMI screen data operable on a Windows PC

The IPC runtime engine, WinGP, can run screen data created for Pro-face HMI on GP-Pro EX software on a Windows PC. \*1

\*1: WInGP can be installed from GP-Pro EX DVD-ROM, only the license needs to be purchased.

# HMI Industrial PC PC

#### Communication with Various Controllers

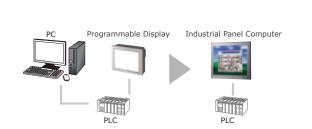
The system configuration which used to be built with PC, HMI and PLC can be built only with IPC and PLC.

#### Downsize System Space

Communication drivers are included as standard so there is no need to develop drivers for communication with PLCs, temperature controllers, and other control devices.

#### Combination with User Applications

Dedicated API allows for flexible integration with in-house PC applications.





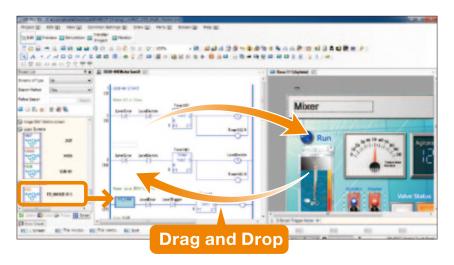
Temperature controller

# Software: GP-Pro EX and Pro-face Remote HMI



#### HMI Screen Editor & Logic Programming Software

Easy sharing of symbolized device data between HMI screen and control programs using drag and drop operation provides you with intuitive operation throughout the successful completion of a project. Function Block control programming also eases your control system design with frequently used and specially defined control functions.





Remote Monitoring Software for mobile

#### Pro-face mobility solutions for remote access

Confirm the cause of an alarm directly with your mobile device and see if the machine can be put back into operation without going on site.

Operate Windows applications via a tablet or a smartphone with Pro-face Remote HMI Server installed on your IPC or PC.

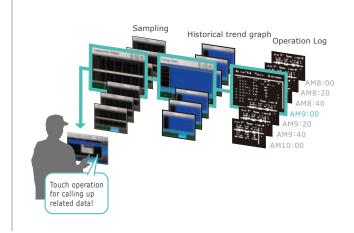




#### Alarm Analysis

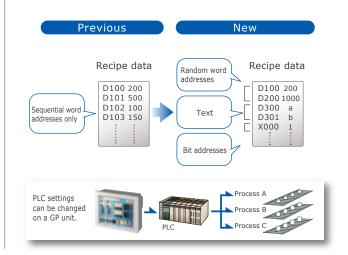
When an error occurs, an operator can easily identify the conditions on-site by touching the alarm message.

This calls up the error-related data in chronological order.



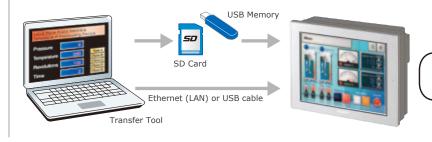
#### **Enhanced Recipes**

Develop recipes for specific devices that even combine diverse elements such as bit data, word data, and strings.



#### Easily Transfer

Screen data can be updated by using the data transfer tool, even without a software license.

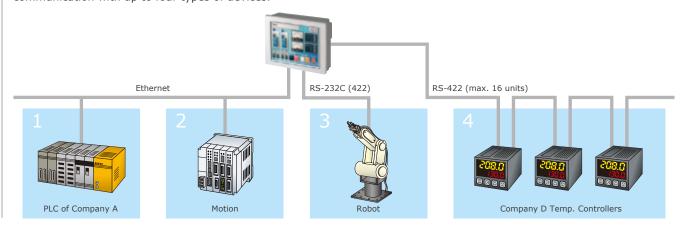


The data transfer tool can be downloaded for free from the Web

http://www.pro-face.com/otasuke/download/

#### A Wide Range of Device Connections

Using the Serial Interface and Ethernet Interface, you can manage all information from a single GP through simultaneous communication with up to four types of devices.

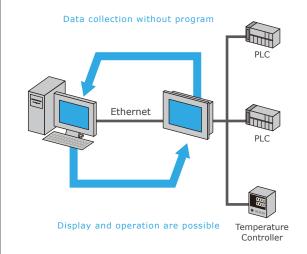




# Advanced Remote Monitoring Software Solutions

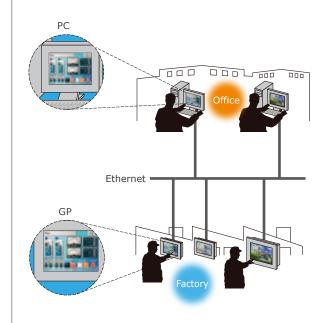
### Data Management **Pro-Server**

Using GP-Pro EX as your platform, you can easily design screens at low cost that gather information on the display and connected equipment. \*1



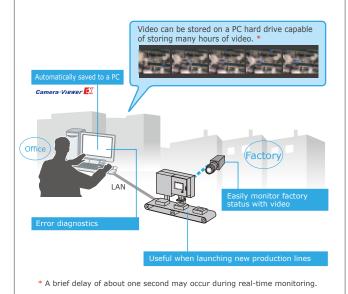


You can remotely monitor GP screens on computers far from the worksite. \*2



### Camara Remote Monitoring Camera-Viewer

Camera-Viewer EX allows you to use an office PC to view in real-time, record and play video from a remote camera connected to a GP. \*2



#### Remote PC Access RPA

With the RPA function, an operation manual on the office PC can be displayed on a GP.\*2



<sup>\*1</sup> To use Pro-Server EX, separate software must be purchased. \*2 To use GP-Viewer EX, Camera-Viewer EX, WinGP, RPA, a separate license must be purchased.



# Connectable Devices

For further information of supported models and options, and cable diagrams, refer to PLC Connection Manual.

	PLC
Manufacture	
3S-Smart Software Solutions GmbH	CODESYS Control Win V3
Beckhoff Automation	Bus Terminal Controller: BC/BX series Embedded PC: CX series IPC/TwinCAT-SoftPLC
Control Technology Corp.	2700 Series
Crouzet	Millenium 3 Smart, Millenium 3 Essential
Delta-TAU data system, inc.	PMAC - PC/104, PMAC-Lite, PMAC-PC Turbo PMAC - Turbo PMAC1, Turbo PMAC2, Turbo Clipper, QMAC, Geo Brick Controller, Geo PMAC Driver, PC/104 Turbo, Turbo PMAC PCI, UMAC
FANUC LTD.	Fanuc Power Mate Serie, Fanuc Power Mate i Series, Fanuc Series
Fatek Automation Corp.	FBs, FBe/FBn
Fuji Electric Co.,Ltd.	MICREX-F, MICREX-SX SPH
GE Intelligent Platforms	Series 90-30, Series 90-70, VersaMaxMicro, Series 90-70R, PACSystemRX7i
Hitachi Industrial Equipment Systems Co., Ltd.	EHV+, H, EH-150, MICRO-EH, Web Controller, EHV, Web Controlle
Hitachi, Ltd.	S10V, HIDICS10a, S10mini
JTEKT Corporation	TOYOPUC-PC2/PC3J/PC3JT/PC3/PC10G
KEYENCE CORPORATION	KV-700/1000/3000/5000/5500, KV Series
KOYO ELECTRONICS INDUSTRIES CO., LTD.	KOSTAC SG/SU/SZ/PZ3/SR, DL205/305/405, Direct Logic05/06
Lenze Vertrieb GmbH	Controller 3200C
LS Industrial Systems Co., Ltd.	GLOFA Series, K1000S, K300S, K200S, K120S, K80S, XGK, XGT, XGB
MEIDENSHA CORPORATION	UNISEQUE
Mitsubishi Electric Corporation	MELSEC AnA, MELSEC AnN, MELSEC Q (A mode), MELSEC QnA, MELSEC Q, MELSEC L, MELSEC FX, MELSEC A
Mitsubishi Heavy Industries, Ltd.	DIASYS Netmation, UP/V
OMRON Corporation	SYSMAC C/g/CV/CS1/CJ1/CJ2/CP1/CP1E/CS/NJ
Panasonic Electric Works SUNX Co., Ltd.	FP
Rockwell Automation, Inc.	SLC500, PLC-5, Control Logix, Micro Logix, Compact Logix
Saia-Burgess Controls Ltd.	PCD1, PCD2, PCD3, PCD4, PCD6
Schneider Electric SA	Nano, Micro, Premium, Twido, Quantum, Momentum, MODBUS communication devices
Sharp Manufacturing Systems Corporation	JW10, JW20H, JW30H, JW50H, JW70H, JW100, JW300
SICK AG	FX3-CPU0, FX3-CPU1
Siemens AG	SIMATIC S7-200/S7-300/S7-400, 90U - 115U Series, 135U/155U Series, S5 Series, S7-1200, LOGO! Series
Siemens Building Technologies	SAPHIR
TOSHIBA CORPORATION	T Series, V Series, EX Series
TOSHIBA MACHINE CO., LTD.	TC200, TC200S, Tcmini
YASKAWA Electric Corporation	Control Pack, MP900, MP2000, MEMOCON GL, MEMOCON SC, MEMOCON Micro, MP3000, A1000, V1000
Yokogawa Electric Corporation	FA-M3, FCN, FCJ

Temperature Controller	
Manufacture	Series
CHINO CORPORATION	DB, KP, LT, JU, JW
Fuji Electric Co., Ltd.	PXH, PXG, PXR (AutoFIX), PXR (NoAutoFIX), PUM
OMRON Corporation	THERMAC NEO, THERMAC, In-Panel NEO
RKC INSTRUMENT INC.	CB, FB400/FB900, HA400/HA900, MA900, MA901, SRV, SRX, SA100, SA200, SR MIni HG(HPCP-A/B), SR Mini, HG (H-PCP-J), SRZ (Z-TIO), REX-F900, REX-F9, REX-D, REX-G9, REXP300, REXP5250, REX-AD, REX-PG, AE500, LE100
Shinko Technos Co., Ltd.	C, FC, FIR, GC, JC, AC, NC, DC, FCL, PC-900
Azbil Corporation (formerly Yamatake Corporation)	SDC10, SDC15, SDC20, SDC21, SDC25, SDC26, SDC30, SDC31, SDC35, SDC36, SDC40A, SDC40B, SDC40G, SDC45, SDC46, DMC10, DMC50, DCP31, DCP32, DCP551, DCP552, CMC10B,NX
Yokogawa Electric Corporation	Temperature Controllers UT100 Series, Digital Indicating Controllers UT2000

Inverter/Servo	
Manufacture	Series
Fuji Electric Co.,Ltd.	FRENIC5000G11S, FRENIC5000P11S, FVR-E11S, FVR-C11S, FRENIC-MEGA, FRENIC-Mini, FRENIC-Eco, FRENIC-Multi
Hitachi Industrial Equipment Systems Co., Ltd.	L300P, SJ300, SJ700, SJ700-2, SJH300, HFC-VAH3, X200, SJ200, L200, WJ200
Mitsubishi Electric Corporation	FR-A700, FR-A701, FR-E700, FR-F700, FR-A500, FR-C500, FR-A500L, FR-E500, FR-F500, FR-F500L, FR-F500L, FR-S500, FR-V500, FR-V500L, FR-B,B3(A500), FR-B,B3(A700)
Sanmei Electronics Co., LTD	Si2, CutyAxis2, CutyAxis3
YASKAWA Electric Corporation	Varispeed AC, Varispeed F7, Varispeed F7S, Varispeed G7, Varispeed L7, VS mini J7, VS mini V7/VS-606V7, V1000, J1000, A1000, Analog Voltage/Pulse Train Reference Type SERVOPACKs For Rotary Servomotors, Analog Voltage/Pulse Train Reference Type SERVOPACKs For Linear Servomotors, SERVOPACKS For Linear Servomotors, VS-V Series Rotary Motors (M-III), X-V Series Linear Motors (M-III), X-V Series Linear Motors (M-III)

Industrial Robot	
Manufacture	Series
DENSO WAVE INCORPORATED	RC7M Controller, RC8 Controller
Estic Corporation	Handy 2000
Hyundai Heavy Industries	Hi4 Robot, Hi5 Robot
IAI Corporation	PCON, ACON, SCON, ERC2, ROBONET X-SEL(Linear Actuator Controller), X-SEL(SCARA Robot Controller), SSEL, ASEL, PSEL, Table-Top Actuator
Seiko Epson Corporation	RC700 Series
SMC Corporation	LECP6, LECA6
Yaskawa Electric Corporation	DX100 Series, FS100 Series
Yamaha Motor Co., Ltd.	TS-S, TS-X, TS-P

Other Devices	
Manufacture	Series
Azbil Corporation (formerly Yamatake Corporation)	PBC Series, CMS Series, CMF Series, CMQ-V Series, MPC Series, MVF Series, CML Series, AUR350C Series, AUR450C Series, RX Series
Cognex Corporation	In-Sight 5000 Series Vision Systems, In-Sight Micro Vision Systems
Digital Electronics Corporation	PC or Micro computer board etc., PC or Micro computer board etc., SIO communication devices, Ethernet communication devices
Modbus-IDA	MODBUS Compatible External Device, MODBUS Slave Device
ODVA (Open DeviceNet Vendor Association, Inc.)	EtherNet/IP communication devices





for the best interface

We are always striving to bring you the high quality interface designed to provide a cohesive, evolving connection between customers and high quality products, service and support from around the world.

on the customer make us "the best interface"

**/**ntimacy

Connect intimately with our customers and stakeholders

Innovation

Provide benefits to our customers through innovation nteraction

Enhance customer experience through positive interaction

#### **A WARNING**

#### HAZARD OF OPERATOR INJURY, OR UNINTENDED EQUIPMENT DAMAGE

Before operating any of these products, be sure to read all related manuals thoroughly.

Failure to follow these instructions can result in death, serious injury or unintended equipment damage.

- For printing purposes, the colors in this catalog may differ from those of the actual unit.

  Actual user screens may differ from the screens shown here.

  All product names used in this catalog are the registered trademarks or trademarks or

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