

Programmable Operator Interface

# TECHNOSHOT

Quick and accurate machine data at your fingertips



**FE** MONITOUCH

# The functions that meet the needs of production sites



TS2060



TS2060i



\* DUR-00 and CUR-xx can be attached.

		TS2060	TS2060i	
Screen memory (FROM)		2.5M bytes	10.5M bytes	
Backup memory (SRAM)		128K bytes	512K bytes	
Stroke font		—	Compatible	
Screen specifications	Display device	TFT color		
	Resolution	320 × 240 dots		
	Display size	5.7 inches (QVGA)		
	Colors	65,536 colors(The software is compatible with displays in 32K colors, 256 colors, 128 colors and monochrome.)		
	Backlight	LED		
	Backlight life	50,000 hrs		
Touch switch	Type	Analog resistive film		
Function switch	Number of switches	6		
External interface	D-Sub 9-pin <sup>1</sup>	—	RS-232C/RS-422/RS-485, asynchronous type, Data length: 7, 8 bits, Parity : odd, even, none, Stop bit : 1, 2 bits, Baud rate : 4800, 9600, 19200, 38400, 57600, 76800, 115200 bps	
	Modular 8-pin (MJ1/2)	RS-232C/RS-422(4-wire type) <sup>2</sup> /RS-485 (2-wire type), asynchronous type, Data length : 7, 8 bits, Parity : odd, even, none, Stop bit : 1, 2 bits, Baud rate : 4800, 9600, 19200, 38400, 57600, 76800, 115200, 187500 bps <sup>3</sup>		
	SD card	—	1 card slot (SD/SDHC card)	
	Ethernet	—	1 CH, Baud rate : 100Mbps, 10Mbps	
	USB	Type mini-B (Ver. 2.0)	Type A, Type mini-B (Ver. 2.0)	
	Communication unit	—	CUR-xx compatible	
Power supply	Permissible range of voltage	DC24 V ± 10%		
	Demand (maximum rating)	13W or lower		
Physical environment	Ambient temperature	0°C ~ +50°C <sup>4</sup>		
	Ambient storage temperature	-10°C ~ +60°C <sup>4</sup>		
	Ambient humidity	85% RH or less (without dew condensation)		
	Storage humidity	85% RH or less (without dew condensation)		
	Operation altitude	2,000 meters or less		
	Operation atmosphere	Not exposed to corrosive gas or excessive dust (free of conductive dust)		
	Contamination level	Level 2		
	Grounding resistance	Less than 100 Ω, FG/SG separation		
Installation conditions	Protect structure	Front panel : Compatible with IP65 (when gasket is used), Rear cover : Compatible with IP20		
	Cooling system	Natural air cooling		
	Dimensions W×H×D	182.5 × 138.8 × 45.8 mm		
	Panel cutout	174.0 <sup>+0.5</sup> × 131.0 <sup>+0.5</sup> mm (Same as for V806/V606e/S806)		
Compatible standards		CE/KC/UL61010-1, UL61010-2-201		
Case color		Black		
Battery		Built-in button battery / Battery life : 5 years (ambient temperature 25°C)		

<sup>1</sup> Only when an optional unit DUR-00 is attached to TS2060i. <sup>2</sup> Only MJ2 is compatible with 4-wire system.

<sup>3</sup> SIEMENS MPI / PPI at 187500 bps is available only with MJ2. <sup>4</sup> Keep wet bulb temperature under 39°C to avoid malfunction.

# support the development of speedy production systems.

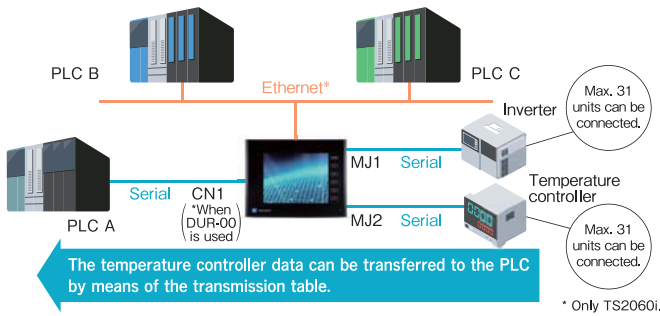
Connection and data transmission with multiple devices are possible.

## 8-way Communication

One TS unit can connect up to eight types of PLC and peripherals of different models and manufacturers via Ethernet (8 protocols) and serial connection (3 protocols).

## Gateway Function (Transmission Table)

Data of multiple units can be read and written by means of the Transmission Table.



Use of SD Cards for Greater Convenience (TS2060i only)

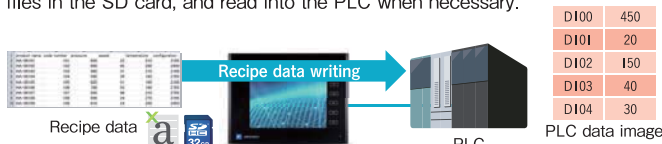
## Sampling Function

Sampling data of the PLC and temperature controller are shown on trend graphs, and saved as CSV files in the SD card.



## Recipe Function

Production conditions and parameters are saved as CSV files in the SD card, and read into the PLC when necessary.



## Screen Data Transmission

Screen data is saved in the SD card and transferred without using a PC.

Functions that Improve Convenience and Safety

## Multilingual

You can change the language displayed on the screen to one of 16 languages. You do not need to manage files for each language.



Compatible language fonts	Japanese, English/ Western European, Chinese (traditional and simplified), Korean, Central European, Cyrillic, Greek, Turkish and Baltic (Other languages can be displayed by using Windows fonts.)
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## Security Function

By setting a function limit according to the user level, a high-security environment can be established.



## Operation Log\*

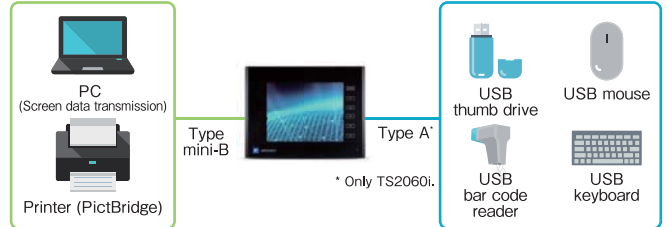
You can view log data for operations such as pushing of buttons and entering of values to analyze the causes of failure.

\* Only TS2060i.

Expansion of connectivity by means of USB ports

## USB Port (Compatible with USB Ver.2.0)

The unit comes with USB ports. Various devices can be connected using Type A\* and Type mini-B ports.



## Path-through Programming

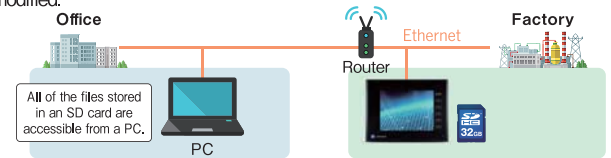
PLC program data can be transferred via the USB slave port. There is no need for cable insertion and removal.



Versatile Network Functions for Increasing Production Efficiency

## FTP Server Function

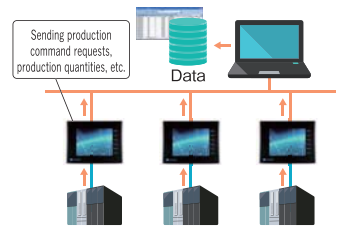
Data stored in an SD card of TS2060i in a remote place can be read out and modified.



## MES Incorporated

Various kinds of information such as production quantity, number of defective products and cause of production stoppage are sent in SQL from TS2060i to the database via V-Server. No program is needed for communication with the database.

(MES: Manufacturing Execution System)



A Product Line that Meets a Wide Variety of Needs

## Special Models

Special models of the TS2000 series are available according to customer needs.

\*Please ask our sales department about the delivery period and price.

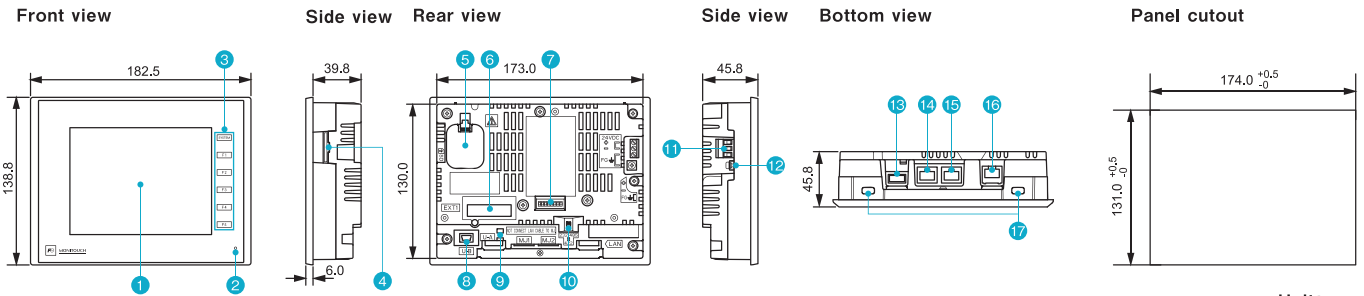
Model	Specifications
TS2060□-U003	Without function switches and Fe-MONITOUCH logo
TS2060□-U150	Without Fe-MONITOUCH logo
TS2060□-004	Sulfidizing-gas resistant

## Vertical Installation

Vertical screen layout (90° rotation) is available for display and editing. The viewing angle is 80° and it is easy to see the screen even when it is installed vertically.



# Dimensions and Part Names



Unit:mm

## Part Names

- |   |                             |   |
|---|-----------------------------|---|
| ① Display   | ⑦ DIP switch                | ⑬ USB-A (U-A) *                         |
| ② Power lamp                                      | ⑧ USB mini-B (U-B)          | ⑭ Modular jack (MJ1)                    |
| ③ Function switches                               | ⑨ USB cable fixing hole     | ⑮ Modular jack (MJ2)                    |
| ④ SD card connector (SD) *                        | ⑩ Slide switch              | ⑯ 100BASE-TX/10BASE-T connector (LAN) * |
| ⑤ Battery holder                                  | ⑪ Terminal block            | ⑰ Screw hole                            |
| ⑥ Communication interface unit connector (EXT1) * | ⑫ Communication FG terminal |   |

\* Only TS2060i.

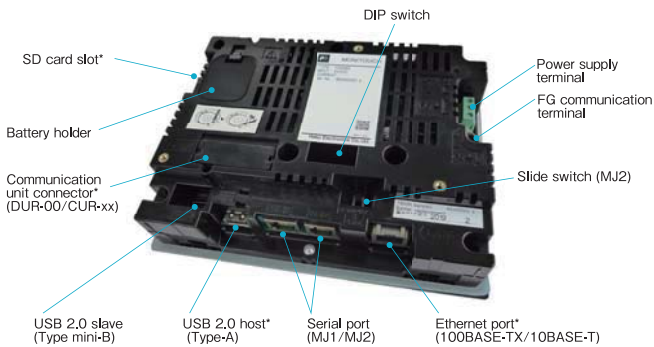
# Model Designation

TS2060i  
TS2060

i : Optional unit DUR-00 and CUR-xx can be attached.  
SD/SDHC slot: 1CH  
Ethernet: 1CH  
USB Type A: 1 port  
External 5V power supply available

None : No above external interfaces  
External 5V power supply not available

# Interface



\* Only TS2060i.

# Optional Units

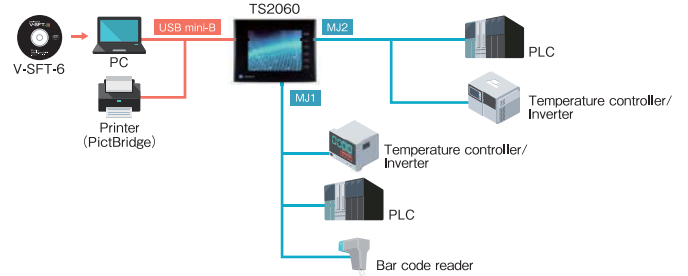
- V-SFT-6** (Configuration software)  
Compatible OS: Windows XP / XP 64 Edition / Vista (32bit,64bit) Win7 (32bit,64bit) / Win8 (32bit,64bit) / Win8.1 (32bit,64bit) / Win10 (32bit,64bit)
- TC-D9** (Terminal Converter) \*  
RS-422/485 terminal converter to connect DUR-00 and a communication unit
- UA-FR** (USB-A port cable) \*  
Cable to connect to the USB-A (master) port
- V906T-GS, V906T-GSN10**  
Protection sheet (5 sheets)  
Non-glare type (V906T-GSN10) is available.
- TS-BT** (Battery)  
Lithium battery for TS2000 series
- DUR-00** (Optional unit) \*  
For attaching a Dsub9 pin
- CUR-xx** (Communication interface units) \*  
Communication units for connecting with networks.  
CUR-00 : OPCN-1    CUR-04 : PROFIBUS-DP  
CUR-01 : T link    CUR-06 : SX bus  
CUR-02 : CC-Link    CUR-07 : DeviceNet  
CUR-03 : Ethernet    CUR-08 : FL-net

⚠ DUR-00 and CUR-xx cannot be used simultaneously.

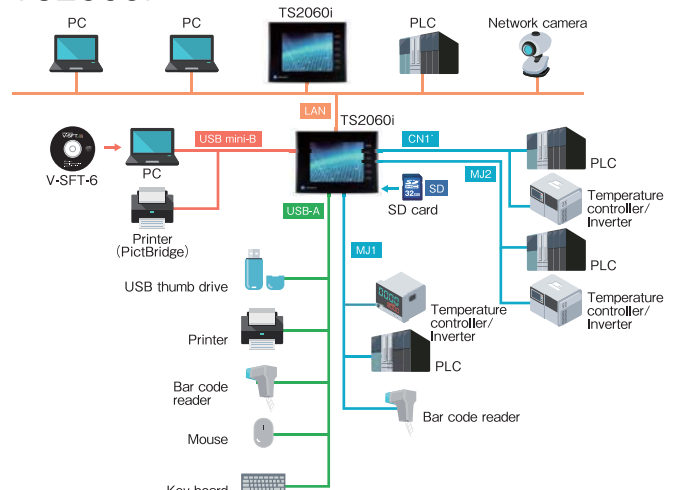
\* Only TS2060i.

# System Configuration

## TS2060



## TS2060i



\*When DUR-00 is attached



## PLC driver list

Maker	PLC	
Allen-Bradley	PLC-5	
	PLC-5 (Ethernet)	
	SLC500	
	SLC500 (Ethernet TCP/IP)	
	NET-ENI (SLC500 Ethernet TCP/IP)	
	NET-ENI (MicroLogix Ethernet TCP/IP)	
	MicroLogix	
	MicroLogix (Ethernet TCP/IP)	
	ControlLogix / CompactLogix	
	ControlLogix (Ethernet)	
	Micro 800 Controllers	
	Micro 800 Controllers (Ethernet TCP/IP)	
	Automationdirect	Direct LOGIC (K-Sequence)
		Direct LOGIC (Ethernet UDP/IP)
	Direct LOGIC (MODBUS RTU)	
Azbil	MX series	
Baumüller	BMx-x-PLC	
Beckhoff	ADS Protocol (Ethernet)	
CIMON	BP Series	
	CP Series	
	S Series	
	S Series (Ethernet)	
DELTA	DVP series	
EATON Cutler-Hammer	ELC	
EMERSON	EC10/EC20/EC20H (MODBUS RTU)	
FANUC	Power Mate	
FATEK AUTOMATION	FACON FB series	
FUFENG	APC Series Controller	
Fuji Electric	MICREX-F series	
	MICREX-F series V4-compatible	
	MICREX-F T-Link	
	MICREX-F T-Link V4-compatible	
	SPB (N mode) & FLEX-PC series	
	SPB (N mode) & FLEX-PC CPU	
	MICREX-SX (T-Link)	
	MICREX-SX (OPCN-1)	
	MICREX-SX (SX bus)	
	MICREX-SX SPH/SPB/SPM/SPE series	
	MICREX-SX SPH/SPB/SPM/SPE CPU	
	MICREX-SX (Ethernet)	
	GE Fanuc	90 series
		90 series (SNP-X)
90 series (SNP)		
90 series (Ethernet TCP/IP)		
RX3i (Ethernet TCP/IP)		
Hitachi	HIDIC-S10/2alpha,S10mini	
	HIDIC-S10/2alpha,S10mini (Ethernet)	
	HIDIC-S10/4alpha	
	HIDIC-S10V	
	HIDIC-S10V (Ethernet)	
Hitach Industrial Equipment Systems	HIDIC-H	
	HIDIC-H (Ethernet)	
	HIDIC-EHV	
	HIDIC-EHV (Ethernet)	
HYUNDAI	Hi5 Robot (MODBUS RTU)	
	Hi4 Robot (MODBUS RTU)	
IDEC	MICRO3	
	MICRO Smart	
	MICRO Smart pentra	
Jetter	JetControl Series2/3 (Ethernet UDP/IP)	
JTEKT	TOYOPUC	
	TOYOPUC (Ethernet)	
	TOYOPUC (Ethernet PC10 mode)	
	TOYOPUC-Plus	
	TOYOPUC-Plus (Ethernet)	
KEYENCE	KZ series link	
	KZ-A500 CPU	
	KZ/KV series CPU	
	KZ24/300 CPU	
	KV10/24 CPU	
	KV-700	
	KV-700 (Ethernet TCP/IP)	
	KV-1000	
	KV-1000 (Ethernet TCP/IP)	
	KV-3000/5000	
	KV-3000/5000 (Ethernet TCP/IP)	
KV-7000 (Ethernet TCP/IP)		
KOYO ELECTRONICS	SU/SG	

Maker	PLC	
KOYO ELECTRONICS	SR-T (K protocol)	
	SU/SG (K-Sequence)	
	SU/SG (MODBUS RTU)	
LS	MASTER-KxxxS	
	MASTER-KxxxS CNET	
	MASTER-K series (Ethernet)	
	GLOFA CNET	
	GLOFA GM7 CNET	
	GLOFA GM series CPU	
	GLOFA GM series (Ethernet UDP/IP)	
	XGT/XGK series CNET	
	XGT/XGK series CPU	
	XGT/XGK series (Ethernet)	
	XGT/XGI series CNET	
	XGT/XGI series CPU	
	XGT/XGI series (Ethernet)	
	MITSUBISHI ELECTRIC	A series link
		A series CPU
		A series (OPCN-1)
		QnA series link
		QnA series CPU
QnA series (Ethernet)		
QnH (Q) series link		
QnH (Q) series CPU		
QnU series CPU		
Q00J/00/01 CPU		
QnH (Q) series (Ethernet)		
QnH (Q) series link (multi CPU)		
QnH (Q) series (multi CPU) (Ethernet)		
QnH (Q) series CPU (multi CPU)		
QnH (Q) series (Ethernet ASCII)		
QnH (Q) series (multi CPU) (Ethernet ASCII)		
QnU series (built-in Ethernet)		
L series link		
L series (built-in Ethernet)		
L series CPU		
A series (CC-LINK)		
QnA series (CC-LINK)		
QnH (Q) series (CC-LINK)		
FX series CPU		
FX2N/1N series CPU		
FX1S series CPU		
FX series link (A protocol)		
FX3U/3UC/3G series CPU		
FX3U/3GE series (Ethernet)		
FX3U/3UC/3G series link (A protocol)		
FX5U/5UC series		
FX5U/5UC series (Ethernet)		
alink+Net10		
Q170MCPUC (multi CPU)		
Q170 series (multi CPU) (Ethernet)		
iQ-R series (built-in Ethernet)		
iQ-R series link		
iQ-R series (Ethernet)		
MODICON		MODBUS RTU
MOELLER		PS4
OMRON		SYSMAC C
		SYSMAC C (OPCN-1)
	SYSMAC CV	
	SYSMAC CS1/CJ1	
	SYSMAC CS1/CJ1 DNA	
	SYSMAC CS1/CJ1 (Ethernet)	
	SYSMAC CS1/CJ1 (Ethernet Auto)	
SYSMAC CS1/CJ1 DNA (Ethernet)		
Panasonic	FP Series (RS232C/422)	
	FP Series (TCP/IP)	
	FP Series (UDP/IP)	
	FP-X (TCP/IP)	
	FP7 Series (RS232C/422)	
	FP7 Series (Ethernet)	
RS Automation	NX7/NX Plus Series (70P/700P/CCU+)	
	N7/NX Series (70/700/750/CCU)	
	NX700 Series (Ethernet)	
	X8 Series	
	X8 Series (Ethernet)	
SAIA	PCD	
	PCD S-BUS (Ethernet)	

## PLC driver list

Maker	PLC
SAMSUNG	SPC series
	N_plus
	SECNET
SHARP	JW series
	JW100/70H COM port
	JW20 COM port
	JW series (Ethernet)
	JW300 series
	JW311/312/321/322 series (Ethernet)
SINFONIA TECHNOLOGY	JW331/332/341/342/352/362 series (Ethernet)
	SELMART
Siemens	S5 PG port
	S7
	S7-200 PPI
	S7-200 (Ethernet ISOTCP)
	S7-300/400MPI
	S7-300/400 (Ethernet ISOTCP)
	S7-300/400 (Ethernet TCP/IP PG protocol)
	S7-1200/1500 (Ethernet ISOTCP)
	S7 PROFIBUS-DP
	TI500/505
TECO	TI500/505 V4 Compatible
Telemecanique	TPO3 (MODBUS RTU)
	TSX Micro
TOSHIBA	T series / V series (T compatible)
	T series / V series (T compatible) (Ethernet UDP/IP)
	EX series
TOSHIBA MACHINE	nv series (Ethernet UDP/IP)
	TC200
TOYO DENKI	μGPCsx (OPCN-1)
	μGPCsx (SX bus)
	μGPCsx series
	μGPCsx CPU
TURCK	μGPCsx series (Ethernet)
	BL Series Distributed I/O (MODBUS TCP/IP)
Ultra Instruments	UIC CPU (MODBUS ASCII)
UNITRONICS	M90/M91 /Vision Series (ASCII)
VIGOR	Vision Series (ASCII Ethernet TCP/IP)
WAGO	M series
XINJE	750 series (MODBUS RTU)
	750 series (MODBUS Ethernet)
Yaskawa Electric	XC Series (MODBUS RTU)
	MEMOBUS
	CP9200SH/MP900
	MP2300(MODBUS TCP/IP)
	CP/MP EXPANSION MEMOBUS (UDP/IP)
	MP2000 series
	MP2000 series(UDP/IP)
	MP3000 series (Ethernet UDP/IP)
	MP3000 series EXPANSION MEMOBUS (Ethernet)
	Yokogawa Electric
FA-M3R	
FA-M3/FA-M3R (Ethernet UDP/IP)	
FA-M3/FA-M3R (Ethernet UDP/IP ASCII)	
FA-M3/FA-M3R (Ethernet TCP/IP)	
FA-M3/FA-M3R (Ethernet TCP/IP ASCII)	
FA-M3V	
FA-M3V (Ethernet )	
Others	FA-M3V (Ethernet ASCII)
	Universal Serial
	FL-Net
	PROFIBUS-DP
	DeviceNet
	Without PLC connection
	MODBUS RTU
	MODBUS RTU EXT Format
	MODBUS TCP/IP (Ethernet)
	MODBUS TCP/IP (Ethernet)Sub Station
	MODBUS TCP/IP (Ethernet) EXT Format
	MODBUS ASCII
	MODBUS slave (RTU)
	MODBUS slave (TCP/IP)
	MODBUS slave (ASCII)
V-Link	

## Temperature Controllers, Servos and Inverters

Maker	Temperature Cotroller/Servo/Inverter	
A&D	AD4402 (MODBUS RTU)	
	AD4404 (MODBUS RTU)	
Agilent	4263 Series	
	SDC10	
	SDC15	
	SDC20	
	SDC21	
	SDC25/26	
	SDC30/31	
	SDC35/36	
	SDC45/46	
	SDC40A	
	SDC40G	
	DMC10	
	DMC50 (COM)	
	AHC2001	
AHC2001+DCP31/32		
Azbil	DCP31/32	
	NX (CPL)	
	NX (MODBUS RTU)	
	NX (MODBUS TCP/IP)	
	Banner	Presense PLUS (Ethernet/IP (TCP/IP) )
	Bosch Rexroth	IndraDrive
	CHINO	LT400 Series (MODBUS RTU)
		DP1000
		DB1000B (MODBUS RTU)
		KR2000 (MODBUS RTU)
LT230 (MODBUS RTU)		
LT300 (MODBUS RTU)		
DELTA TAU DATA SYSTEMS	LT830 (MODBUS RTU)	
	PMAC	
	PMAC (Ethernet TCP/IP)	
	PYX (MODBUS RTU)	
	PXR (MODBUS RTU)	
	PXF (MODBUS RTU)	
	PXG (MODBUS RTU)	
	PXH (MODBUS RTU)	
	PUM (MODBUS RTU)	
	F-MPC04P (Loader)	
Fuji Electric	F-MPC Series /FePSU	
	FVR-E11S	
	FVR-E11S (MODBUS RTU)	
	FVR-C11S (MODBUS RTU)	
	FRENIC5000G11S/P11S	
	FRENIC5000G11S/P11S (MODBUS RTU)	
	FRENIC5000VG7S (MODBUS RTU)	
	FRENIC-HVAC/AQUA (MODBUS RTU)	
	FRENIC-Mini (MODBUS RTU)	
	FRENIC-Ace (MODBUS RTU)	
	FRENIC-Eco (MODBUS RTU)	
	FRENIC-Multi (MODBUS RTU)	
	FRENIC MEGA (MODBUS RTU)	
	FRENIC MEGA SERVO (MODBUS RTU)	
	FRENIC-VG1 (MODBUS RTU)	
	FRENIC Series (Loader)	
	HFR-C9K	
	HFR-C11K	
HFR-K1K		
PPMC (MODBUS RTU)		
FALDIC-alpha series		
FALDIC-W series		
PH series		
PHR (MODBUS RTU)		
WA5000		
APR-N (MODBUS RTU)		
ALPHA5 (MODBUS RTU)		
ALPHA5 Smart (MODBUS RTU)		
WE1MA (Ver.A) (MODBUS RTU)		
WE1MA (Ver.B) (MODBUS RTU)		
WSZ series		
WSZ series (Ethernet)		
Gammaflux	TTC2100	
Hitachi Industrial Equipment Systems	SJ300 series	
	SJ700 series	
IAI	X-SEL controller	
	ROBO CYLINDER (RCP2/ERC)	
	ROBO CYLINDER (RCS/E-CON)	
	PCON/ACON/SCON(MODBUS RTU)	

## Temperature Controllers, Servos and Inverters

Maker	Temperature Cotroller/Servo/Inverter	
KOGANEI	IBFL-TC	
Lenze	ServoDrive9400 (Ethernet TCP/IP)	
MITSUBISHI ELECTRIC	FR-500	
	FR-V500	
	MR-J2S-*A	
	MR-J3-*A	
	MR-J3-*T	
	FR-E700	
MOOG	J124-04x series	
M-SYSTEM	R1M series (MODBUS RTU)	
OMRON	E5AK	
	E5AK-T	
	E5AN/E5EN/E5CN/E5GN	
	E5AR/E5ER	
	E5CK	
	E5CK-T	
	E5CN-HT	
	E5EK	
	E5ZD	
	E5ZE	
	E5ZN	
	V600/620/680	
	KM20	
	KM100	
	V680S (Ethernet TCP/IP)	
	Orientalmotor	High-efficiency AR Series (MODBUS RTU)
		CRK Series (MODBUS RTU)
Panasonic	MINAS A4 Series	
	LP-400	
RKC	KW Series	
	SR-Mini (MODBUS RTU)	
	CB100/CB400/CB500/CB700/CB900 (MODBUS RTU)	
	SR-Mini (Standard Protocol)	
	REX-F400/F700/F900 (Standard Protocol)	
	SRV (MODBUS RTU)	
	MA900/MA901 (MODBUS RTU)	
	SRZ(MODBUS RTU)	
FB100/FB400/FB900 (MODBUS RTU)		
RS Automation	CSD5 (MODBUS RTU)	
	Moscon-F50 (MODBUS RTU)	
SANMEI	Cuty Axis	
SanRex	DC AUTO (HKD type)	
SHARP	DS-30D	
	DS-32D	
SHIMADEN	SHIMADEN standard protocol	
SHINKO TECHNOS	C Series	
	FC Series	
	GC Series	
	DCL-33A	
	JCx-300 Series	
	PC-900	
	PCD-33A	
	ACS-13A	
	ACD/ACR Series	
	WCL-13A	
Siemens	S120 (Ethernet ISOTCP)	
SUS	XA-A*	
TOHO	TTM-000	
	TTM-00BT	
	TTM-200 (MODBUS RTU)	
TOKYO CHOKOKU PRODUCTS	MB3315/1010	
TOSHIBA	VF-S7	
	VF-S9	
	VF-S11	
	VF-S15	
	VF-A7	
	VF-AS1	
	VF-P7	
	VF-PS1	
	VF-FS1	
	VF-MB1	
	VF-nC1	
	VF-nC3	
	TOSHIBA MACHINE	VELCONIC series
ULVAC	G-TRAN series	
UNIPULSE	F340A	
	F371	
	F720A	

Maker	Temperature Cotroller/Servo/Inverter
UNIPULSE	F800
	F805A
YAMAHA	RCX142
Yokogawa Electric	UT100
	UT750
	UT550
	UT520
	UT350
	UT320
	UT2400/2800
	UT450
	UT32A/35A (MODBUS RTU)
	UT52A/55A (MODBUS RTU)
	UT75A (MODBUS RTU)
μR10000/20000 (Ethernet TCP/IP)	
Others	MODBUS RTU
	MODBUS TCP/IP (Ethernet)

## Safety Considerations

- For safe operation, read the instruction manual or user manual that comes with the product carefully or consult the distributor from which you purchased the product, before using the product.
- Products introduced in this catalog have not been designed or manufactured for such applications in a system or equipment that will affect human bodies or lives.
- Customers, who want to use the products introduced in this catalog for special systems or devices such as for atomic-energy control, aerospace use, medical use, passenger vehicle, and traffic control, are requested to consult the Hakko Overseas Sales Section.
- Customers are requested to prepare safety measures when they apply the products introduced in this catalog to such systems or facilities that will affect human lives or cause severe damage to property if the products become faulty.
- For safe operation, wiring should be conducted only by qualified engineers who have sufficient technical knowledge about electrical work or wiring.

## Notes to consider before purchasing

- Appearance and specifications are subject to modification without prior notice due to technical improvements.
- Colors in the catalog may differ from the actual colors due to printing inaccuracies.
- Consult your distributor or us for further information about products in this catalog.

# [www.monitouch.com](http://www.monitouch.com)

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