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L&T SWITCHGEAR
SAFE & SURE



LN Touch Human Machine Interface

Product improvement is a continuous process. For the latest information and special applications, please contact any of our offices listed here.

L&T SWITCHGEAR
SAFE & SURE

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 **LARSEN & TOUBRO**

 **LARSEN & TOUBRO**

Larsen & Toubro is a technology-driven USD 9.8 billion company that infuses engineering with imagination. The Company offers a wide range of advanced solutions in the field of Engineering, Construction, Electrical & Automation, Machinery and Information Technology.

L&T Switchgear, which forms part of the Electrical & Automation business, is India's largest manufacturer of low voltage switchgear, with the scale, sophistication and range to meet global benchmarks. With over four decades of experience in this field, the Company today enjoys a leadership position in the Indian market with growing presence in international markets.

It offers a complete range of products including controlgear, powergear, motor starters, energy meters, wires and host of other accessories. Most of our product lines conform to international standards, carry CEE markings and are KEMA certified.



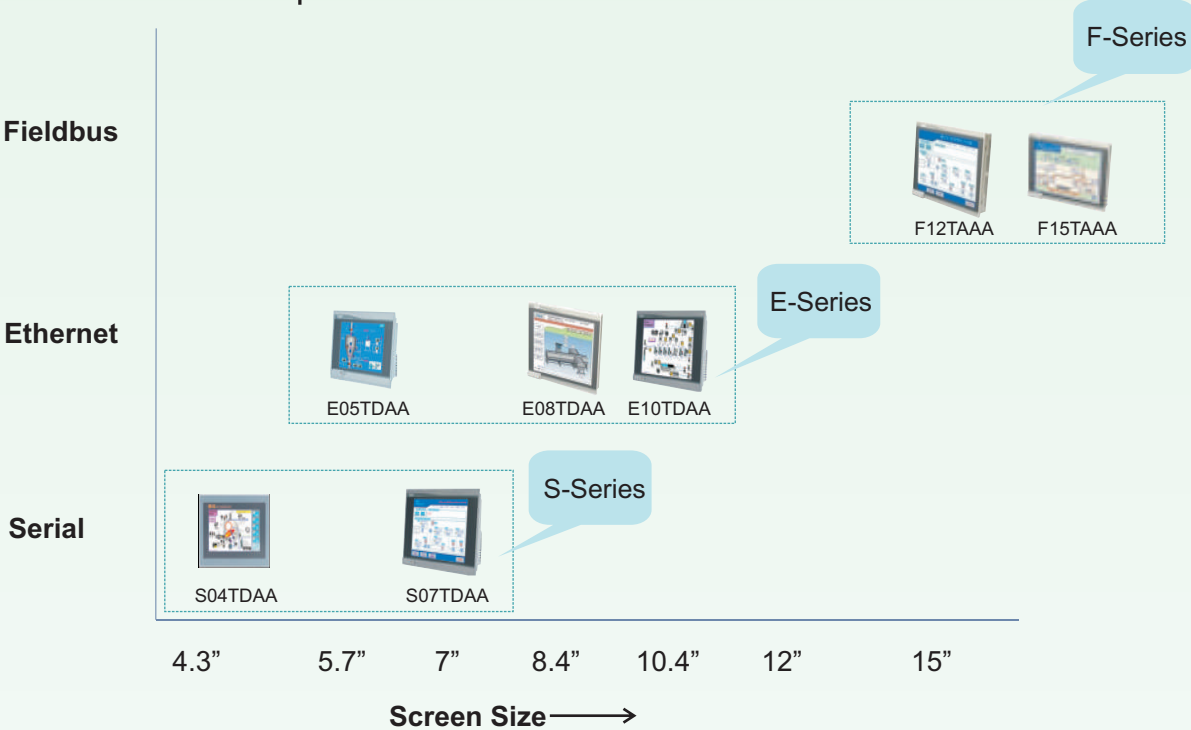
Switchgear Factory, Mumbai

LN Touch  HMI -----	01
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Human Machine Interfaces commonly known as HMI are deployed for control and visualization interface between a human and a process, machine, application and appliance. Increasingly, HMI's are becoming an integral part of Factory Automation. L&T, being one of the leading manufacturers of switchgear products in the country is introducing complete range of HMI products which can be used in Factory Automation to improve Productivity, and of the system Efficiency.



Product Line Up



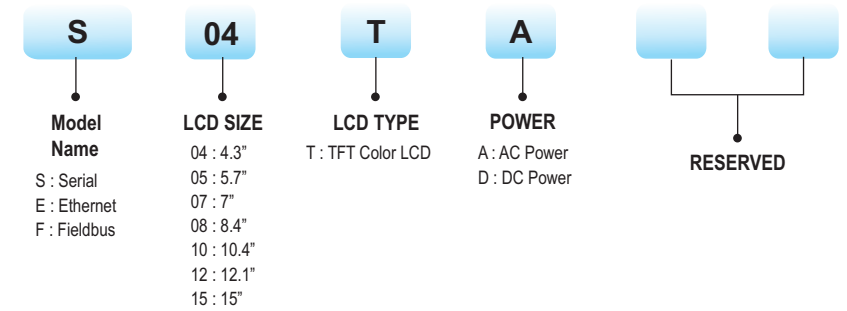
A Brief Glance

Model Name		F15TAAA	F12TAAA	E10TDAA	E08TDAA	E05TDAA	S07TDAA	S04TDAA
Screen Size		15"	12.1"	10.4"	8.4"	5.7"	7"	4.3"
Display Type		TFT Color	TFT Color	TFT Color	TFT Color	TFT Color	TFT Color	TFT Color
Display Color		64K Color	64K Color	64K Color	64K Color	64K Color	64K Color	64K Color
Resolution (pixels)		1024 x 768	800 x 600	640 x 480	640 x 480	320 x 240	800 x 480	480 x 272
Screen Memory		26MB	26MB	26MB	26MB	6MB	26MB	6MB
Back up memory		256KB	256KB	256KB	256KB	256KB	256KB	256KB
Serial	RS-232C	☑	☑	☑	☑	☑	☑	☑
	RS-422/485	☑	☑	☑	☑	☑	☑	☑
Ethernet	10/100Base-T	☑	☑	☑	☑	☑	-	-
USB	USB1.1	☑	☑	☑	☑	☑	-	-
CF Card	Compact Flash	☑	☑	☑	☑	☑	-	-
Print	Roll Printer	☑	☑	☑	☑	☑	☑	☑
	Printer	☑	☑	☑	☑	☑	☑	☑
Brightness		350 cd / m²	380 cd / m²	350 cd / m²	400 cd / m²	400 cd / m²	350 cd / m²	500 cd / m²
Panel Cut Out (W x H)		355 x 286	306 x 247	260 x 202	222 x 168	158 x 126	199 x 129	121 x 95
Dimension (in mm)		366 x 296.5 x 58	317 x 257 x 58	270 x 212 x 58	232 x 177 x 60	170 x 138 x 60	206 x 136 x 64	128 x 102 x 55

Core HMI System of FA Field

- Built-in Various Network
- Add Data Management
- Value UP Your System

Ln Touch series assortment of detail model name



F Series

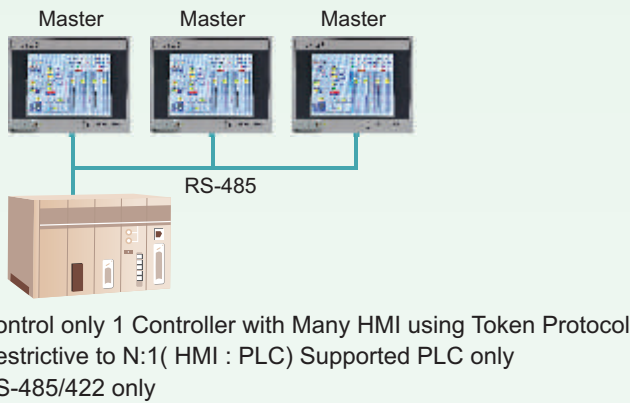
Serial & Fieldbus Network

1. Serial Communication

1:1 Communication

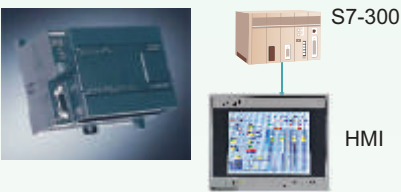


N:1 Serial Communication

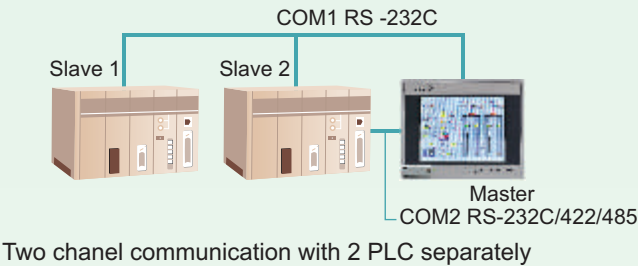


MPI Direct Network

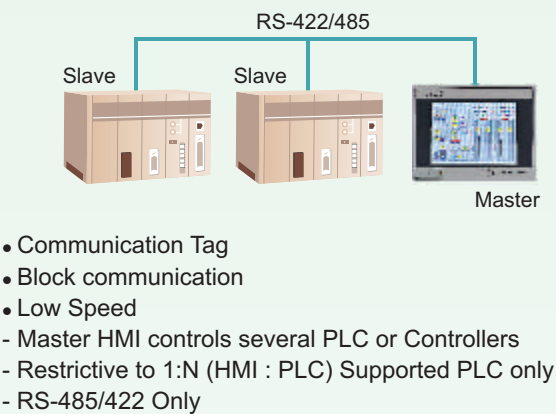
- High Speed Communication (Fixed 187, 500bps)
- RS-485
- Long Distance Communication (Max 1.2km)
- Do not need MPI adapter



Two Way Communication



Multi Drop

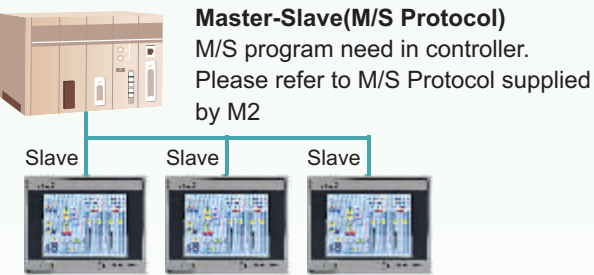


Slave

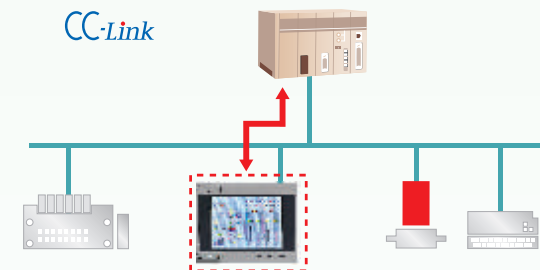


2. Field Network

Profibus DP



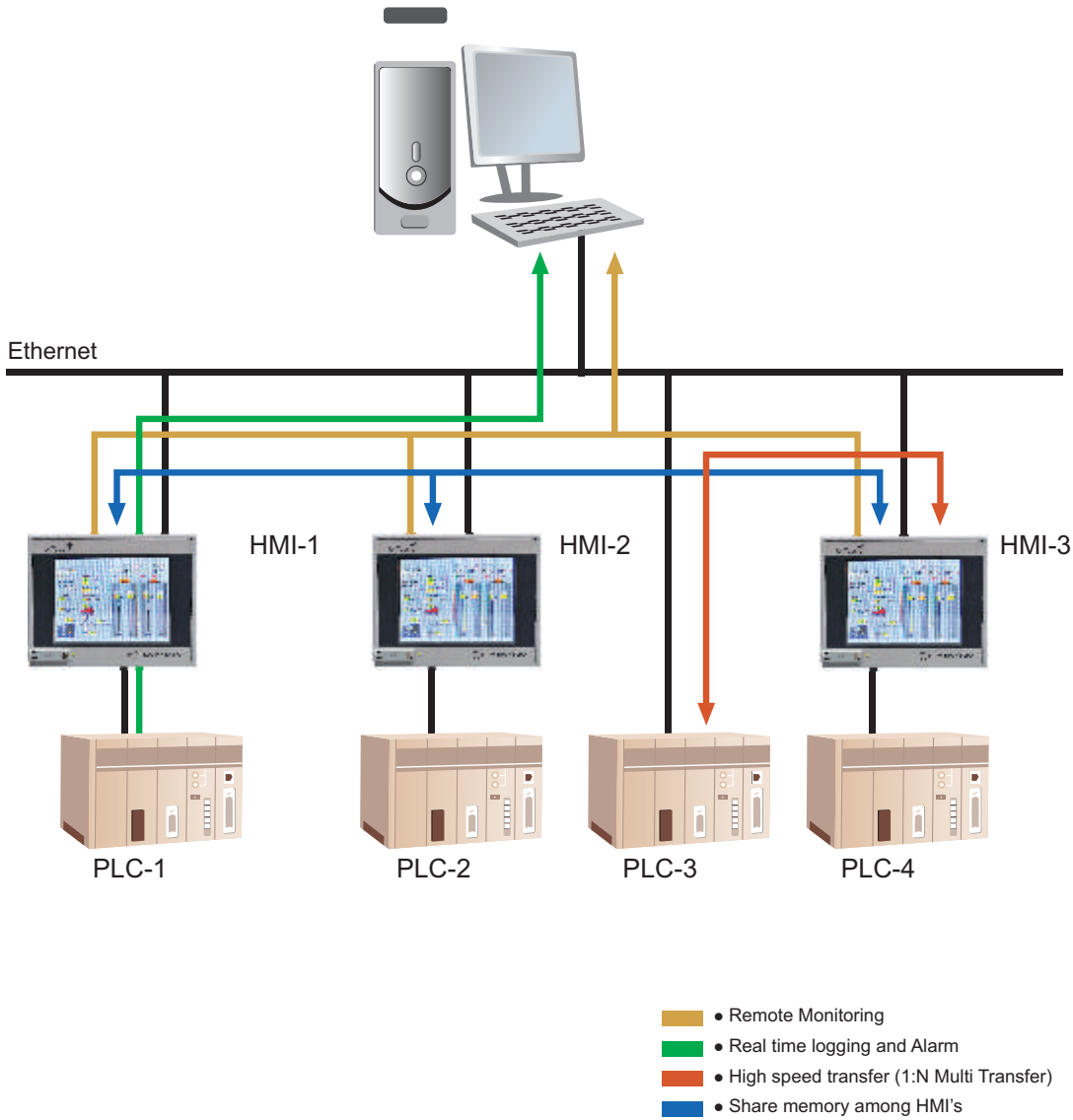
CC Link



3. Remote Monitoring Service & Application S/W

Ethernet

- Remote Monitoring
- Real time logging and Alarm
- High speed transfer(1:N Multi Transfer)
- Share memory among HMI's



Optional accessories for communication

- USBCABLE-MINI : USB program downloading cable for E & F series HMI
- USBCONVERTER-MINI : USB to serial converter for S-series HMI
- USBCONVERTER-COM : USB to serial converter for all HMI
- CCLINK-CARD : Fieldbus option, CCLINK
- PBUS-CARD : Fieldbus option, Profibus

Features

1. High Image Quality & Clearness

65, 536 Color & Analog Touch

High Color TFT LCD & STN LCD Support wide viewing angle



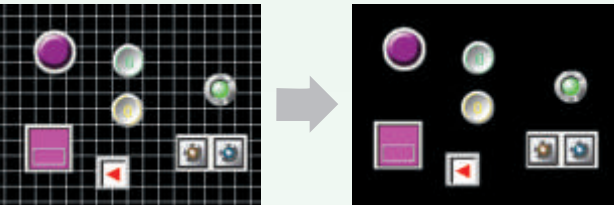
JPG Support

Support Real Jpe as compared to competitor. Available to Tag, Diagram, Function and every objects which use Image. File capacity of JPG is reduced to 90% as compared to Bitmap file. So it is possible to raised the efficiency of memory consumption.

2. Clear Screen without Grid

Adopt Analog Touch Screen

Compared with existing matrix touch screen, It has no scale marks in it's face. so it is clean. Designing is possible, free from the restriction of grid. So user can conveniently arrange objects on the screen.



3. Improved User Interface

Multi Language Table

Design for conversion of language in the string table
A string table, which makes it possible to simply set a language for each country, is available so while working, User can change the previously designed language in the same table by using the programmable function



Extend Alarm Functions

Easy Indication to be easy understanding for Operator

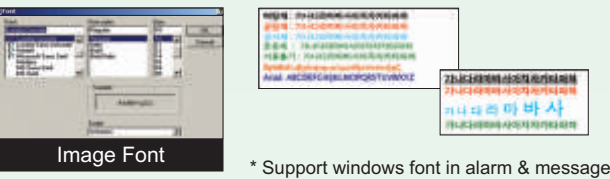
- Various editor key options to control contents in alarm list
- Display in time & reverse time order on events like occurrence/clearance/acknowledge of alarm
- Setting of Alarm & Subsidiary explanation : shift screen/display subsidiary explanation by using ex-tag
- Display alarms stored in CF Card



Windows Font

- Support Various Fonts

Make various size of fonts and font style using the MS Windows Font on the PC



Various graphic library available

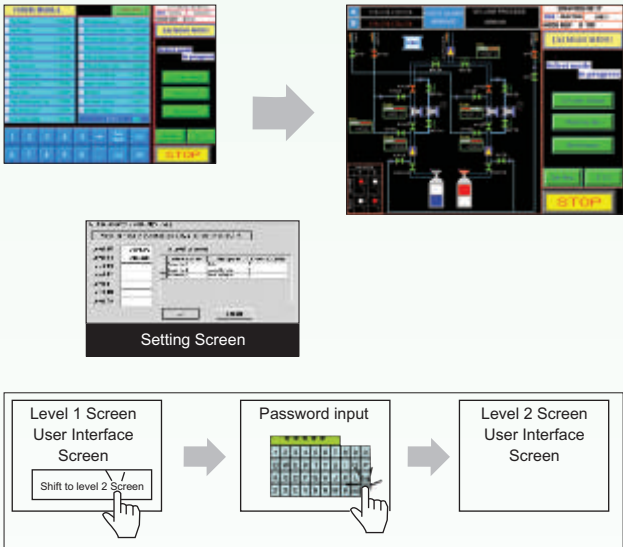
Adopt graphic images which are often used at sites. Classification by object is easy so it can be used for various product group. Also support high quality vector library make user interface more conveniently



Security Setting

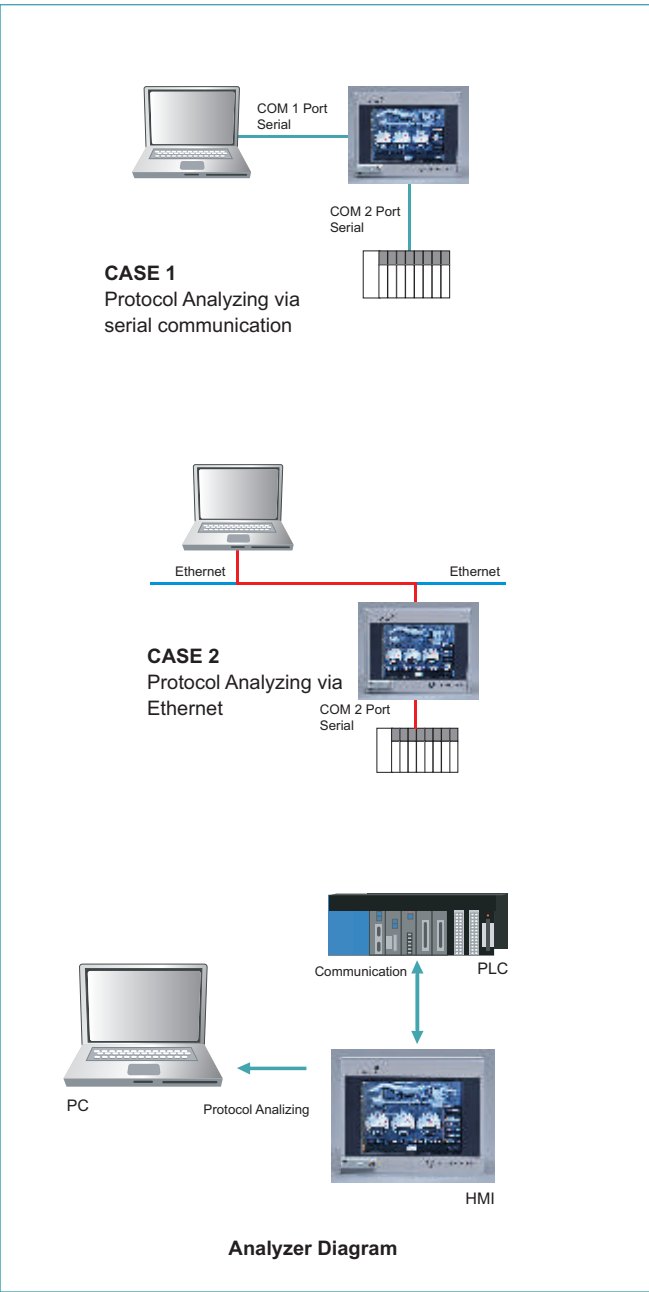
Security Setting per each Screen Making authority of setting & access to the screen to who have access rights.

- Set up password & security level for each screen
- Password ten key to input password like default ten key
- Max. 16 levels of security settings and initialization of levels



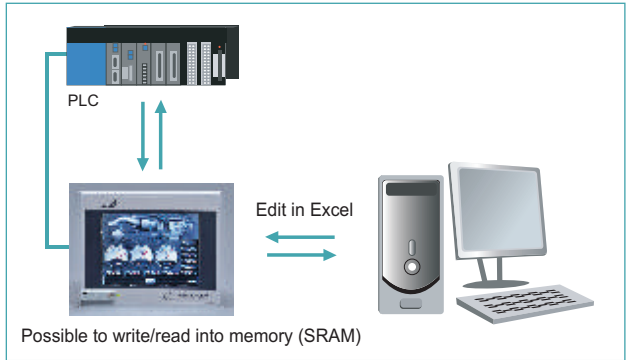
HMI Analyzer

Analyze communication problems, which happen on sites, with the analyzer function of HMI. That is, possible to save communication details between HMI and PLC in a file, using the HMI Analyzer function. By analyzing them, It is possible to easily solve communication problems.



Recipe

Saving data such as the conditions for mixture or processing of Materials into HMI's inner memory (SRAM) and then, to read/write in PLC that need the data. For Instance, creates data to write in PLC and then, writes data values, which are consecutively created from specified device, It offers the function of reading large quantity of device values from PLC that is consecutively connected from a specific device. When power is OFF, Recipe maintains the data that are saved last.



Pass Through



Summary : Through the PC or Micom Controllers which connected COM 1 Serial port of HMI control the PLC which connected COM 2 Serial port of HMI via HMI

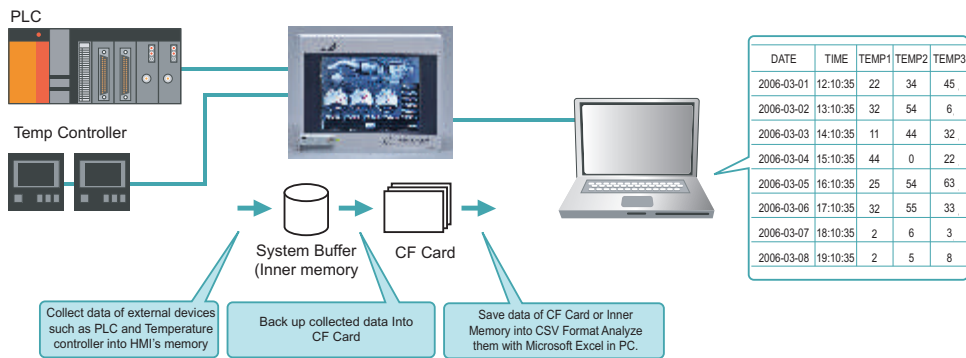
Function :

1. Download, upload, monitoring the program of PLC via COM 2 of HMI
2. Direct Communication with Controller via COM1 of HMI

Note : It is possible that In case of downloading PLC program with loader port communication. Downloading from USB, ETHERNET will be developed later.

Data Logging

Collect data of external devices such as temperature controller and PLC into HMI's memory according to the conditions for period and device value. Basically Logging is saved in SRAM (256KB) or CF Card and Back up in CF card or USB memory Stick. It is possible to represent logged data into graph using recorder tag and extended graph tag. Also possible to convert into CSV format which can be used in PC so it is possible to analyzer data with S/W like Micro Soft Excel.



DATE	TIME	TEMP1	TEMP2	TEMP3
2006-03-01	12:10:35	22	34	45
2006-03-02	13:10:35	32	54	6
2006-03-03	14:10:35	11	44	32
2006-03-04	15:10:35	44	0	22
2006-03-05	16:10:35	25	54	63
2006-03-06	17:10:35	32	55	33
2006-03-07	18:10:35	2	6	3
2006-03-08	19:10:35	2	5	8

Logging Table

Display stored logging data as designed format of table

- Assignment of title name to each word
- Scroll stored logging data with up & down, right & left direction
- Display stored logging data both SRAM and CF Card
- Easy Interface to data back up to USB from CF Card through
- File Manager Program

Recorder

- Simple checking of logged data with graph

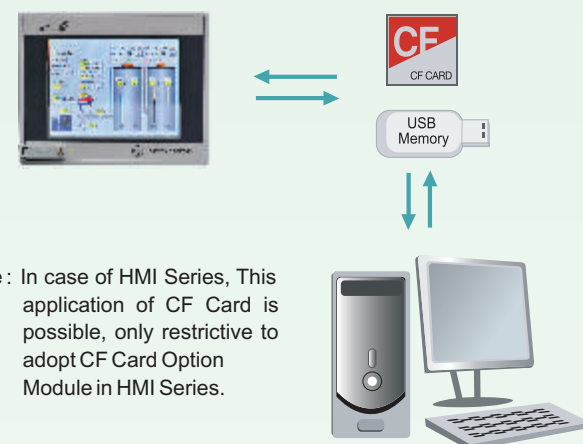
By adding recorder tag, it is possible to represent the data values, which are saved through the logging function, in graph and then, monitor the past and the present history. It is possible to represent the data values, which are saved through the logging function, and the files, which are saved in not only the inner memory, but also CF cards, in graph. It is possible to show the past information by use of a scroll switch only. It is possible to represent the cursor or the device value and the time the cursor is located.



Use of CF card and USB memory

1. Effective use of CF card and USB memory

It is possible to save PLC data in CF card or USB memory, to convert them into CSV data when necessary, and then, to make out a daily or a monthly document. (However, in the case of USB, it is possible to save PLC data only if data are copied from CF card.) It is possible to save picture, OS, or font files in CF card or USB memory, and then, to transmit to the HMI's memory. In case there are several HMI's, set-up is possible only by transmitting picture program to each HMI with a CF card or USB memory.



*Note: In case of HMI Series, This application of CF Card is possible, only restrictive to adopt CF Card Option Module in HMI Series.

4. Various Interface Built-in

USB and Ethernet built-in

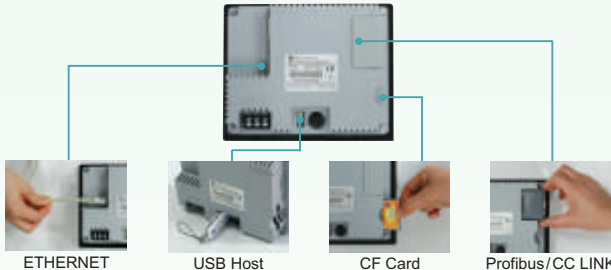
1. USB Host/Device built-in

Through USB interface, Connect USB Storage (stick) and transfer the data.

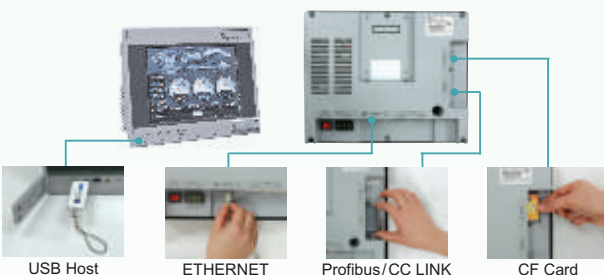
2. High speed transfer with PC through Ethernet

Upload/download of program and data communication such as logging, alarm, and recipe have become fast and simple. By use of various kinds of Ethernet package software, it becomes possible to remote-monitor and control from PC.

5.7"~10.4" LCD Model



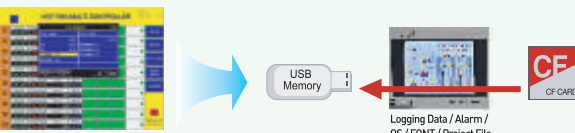
12.1"~15" LCD Model



Data Management by File List

1. Data Management Tool for CF Card and USB Memory

- Copy data (Logging, alarm, OS, Fonts, Screen Program) Both CF Card and USB In RUN Mode
- Easy Interface to data back up & Operation by using USB Memory & CF Card



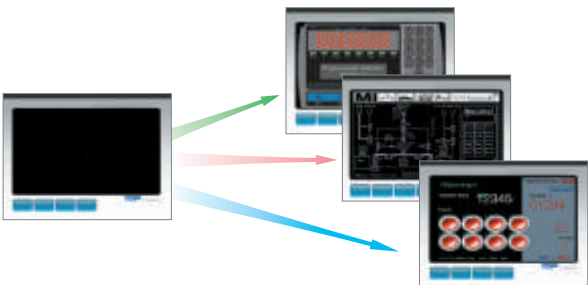
Barcode reader and roll printer

1. Communication of Barcode reader and roll printer

Save ASCII data, which are read through the connection with the barcode reader, in PLC designated by a user or HMI's inner memory (SRAM). It is possible to temporarily designate completion byte which can confirm that barcode data have been successfully read. It is possible to print data by connecting with the roll printer. The above connecting devices all use RS-232C interface to communicate.

Master Screen

- Be able to set Master Screen (No limit of diagram, Tags)
- Be applied in each base screen
- Can not be applied In special designed base screen
- Increase the efficiency of memory consumption by using master screen

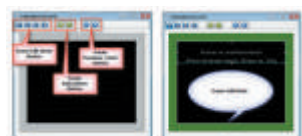


Frame

- Support 4 Frame set without no limit of it's number
- Available to raise the efficiency of memory consumption to use frame



- Support Frame Editor Mode conversion in Base screen with Icon
- Assign the area of Frame with drag of mouse and register tags and diagrams in Frame Editor mode
- Select Frame which it is registered and apply them to base screen



Automatic Update

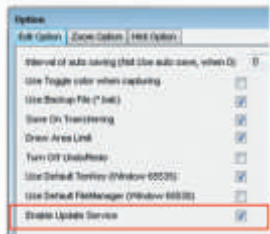
When the version up or urgent patch of Lx TouchTM Soft are happened, It can inform the change of S/W and install the new version or urgent patch install automatically.

1. Enable Update Service

- When Lx TouchTM Soft are started in PC which it is online, user can check out the new version up or urgent install from the installable cd



[Window of Online update]



[Enable Update Service]

2. Unable Update Service

- Through Main Menu of Lx TouchTM Soft, User can check out the change of S/W



Group ON/OFF

- Available to set the group of Object (diagram, Tags) visible or invisible
- After setting the group, user can assign them for Bit condition
- Support object to pop up without window screen and window tag



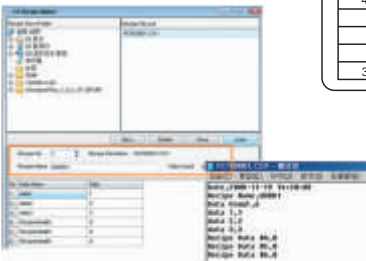
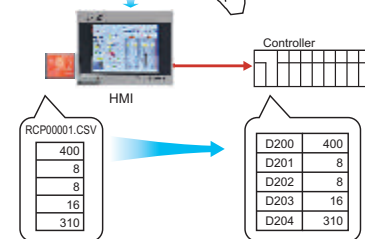
Recipe Transfer Via CF Card

- Save CSV Format data to CF Card in Excel
- Transfer above CSV data to HMI or PLC
- Provided Easy Interface to edit the data Because user can edit the data in Excel
- Moreover CF Recipe Maker supply solution to Easy Interface as follows



In case of using File Manager in running screen of HMI

List <CF>	List
RCP0000.CSV	HIMI <DIR>
RCP0001.CSV	CF <DIR>
RCP0010.CSV	USB <DIR>



Library Viewer



- Support Drag & Drop interface
- High Speed Browsing
- Support detail information of image
- Adding images by Drag & Drop from Windows explorer

Address In put/Auto Completion



- Input address by keyboard
- Various tooltip appears according to device
- Support auto-completion
- Also traditional keypad is possible

Figure & Teg Specification

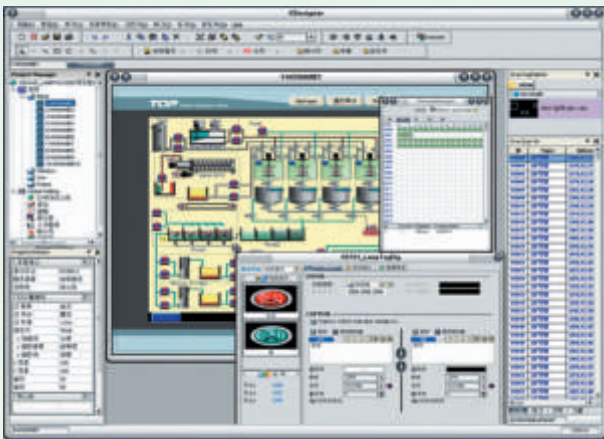


- Real-time previews
- Clear, easy-to-understand Specification

Memory Viewer



- Address assignment can be visually shown, ensuring by icon efficiency.
- By clicking on the used address, the Tag IDs where the address are used will be displayed.



- 1 Project manager**

 - Intuitive and easy interface
 - Manage two or more projects
- 2 Convenient User Interface**

 - Support standard MDI Type & Tab Type
- 3 Menu, Toolbar**

 - Simple/Convenient layout of Icon
 - Grouping tags with similar themselves
- 4 Memory View**

 - Address assignment can be visually shown
- 5 My Clipboard**

 - Managing user libraries
 - All tags, drawings, groups and images are possible
- 6 Information list**

 - All objects registered are shown
 - The fastest view
- 7 Tag dialog**

 - Support previews
 - Changed all of olders
- 8 Property list**

 - Summarize properties of selected objects

- ▶ Open/manage multiple project files simultaneously
- ▶ The most fastest editing of numerous objects in screens
- ▶ Memory map
- ▶ Support My Clipboard
- ▶ As specification, Preview can be done
- ▶ Support image-libraries of vector
- ▶ Support Layer
- ▶ Support snap to object
- ▶ Support lock/unlock each object
- ▶ A wide variety of attractive libraries are prepared
- ▶ Change tags within familiar tags
- ▶ Make/Modify date/time of object can be issued
- ▶ Guideline alignment
- ▶ OFF-Line simulation (*1)
- ▶ Text table in Unicode
- ▶ New script editor
- ▶ Fix and Hide (Not transferred) function in all objects
- ▶ Resolution converter
- ▶ Input address by keyboard with completion automatically
- ▶ Support variables of address
- ▶ (*1) : Under Developing

Project Manager



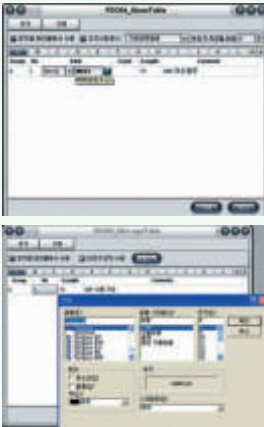
- Support Multiple project files
- Copy with screens or list
- Import/Export

Multiple Language Table



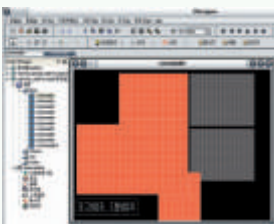
- Simple copy & paste functions to place data into the text table after translation in CSV or Excel
- The language of other countries input is possible regardless of a language of the OS by supporting Unicode.

Alarm / Message Table



- Input address by keyboard
- Excel compatible
- Image text/Text table possible.

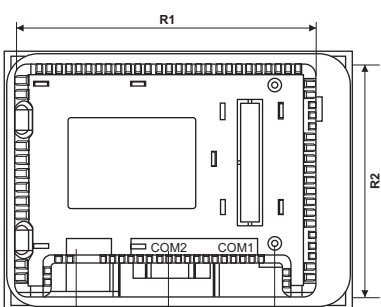
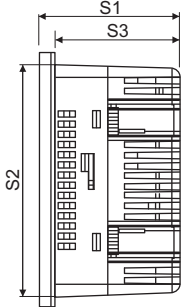
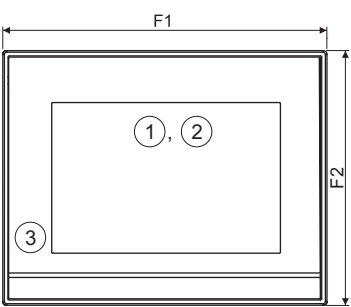
Fast Editing



- Regardless of plentiful tags or drawings or images, drawing and registration are comfortable.

Dimensions And Specifications

E04TDAA



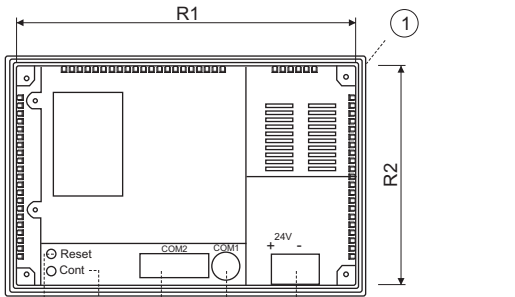
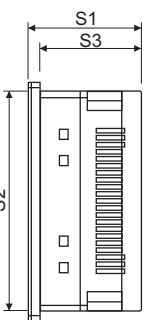
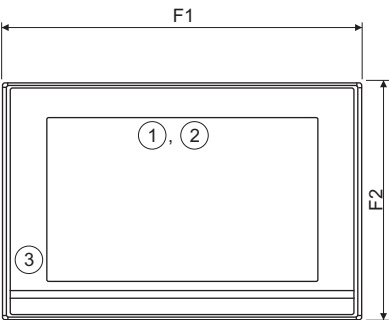
Front View

Side View

Rear View

Input Power Terminal
COM2: RS-232C, Reset Switch
RS-422/RS-485
COM1: (1) PS/2 Connector RS-232C
(2) Serial to USB Converter
Pay extra Goods

E07TDAA



Front View

Side View

Rear View

(6) Reset Switch

(4) COM:1

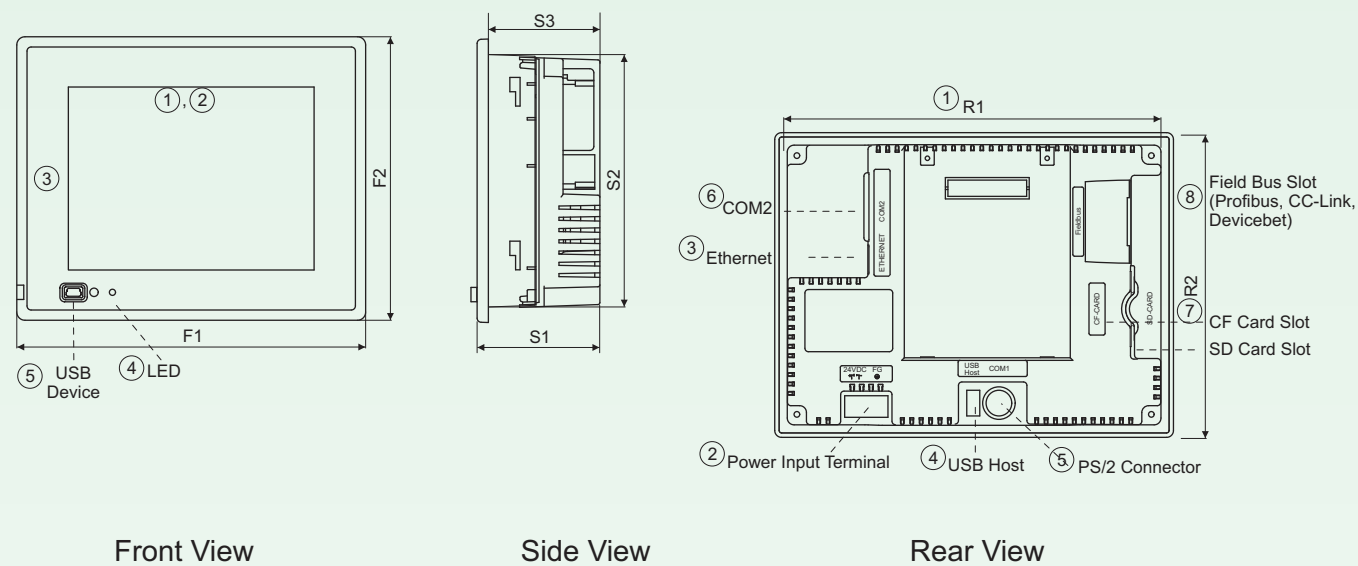
Outer Dimension

Model	Front		Side			Rear	
	F1	F2	S1	S2	S3	R1	R2
S04TDAA	128	102	55	92.3	50	118.3	92.3
S07TDAA	206	136	64.5	125	57.5	194.5	125

Front Part Names and Specifications

No.	Title		Feature	
1	LCD	Model	S04TDAA	S07TDAA
		Type	TFT 65, 536 COLOR LCD	
		Brightness	500 cd/m ²	350 cd/m ²
		Screen Size	4.3Inch	7Inch
		Resolution	480 X 272	800 X 480
2	Touch Panel	Touch Type	Analog	
3	Front Sheet	Front Vinyl Cover Sheet for Damp Proof and Dust Proof		

E05TDAA / E08TDAA



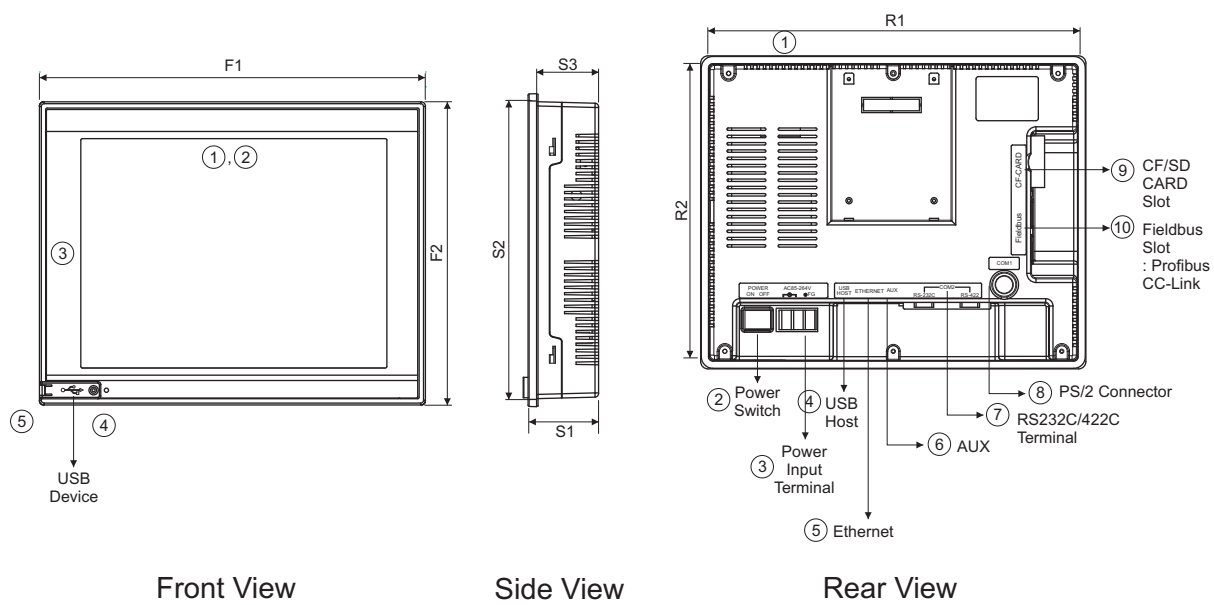
Outer Dimension

Model	Front		Side			Rear	
	F1	F2	S1	S2	S3	R1	R2
E05TDAA	170	138	60	123	54.5	155.5	123.3
E08TDAA	232	177	60	165	54.5	220	165

Front Part Names and Specifications

No.	Title		Feature		
1	LCD	Model	E05TDAA		E08TDAA
		Type	TFT 65, 536 COLOR		
		Brightness	450 cd/m ² 400 cd/m ²		
		Screen Size	14cm / 5.7Inch		21cm / 8.4Inch
		Resolution	320 X 240		640 X 480
2	Touch Panel	Touch Type	Analog		
3	Front Sheet	Front Vinyl Cover Sheet for Damp Proof and Dust Proof			
4	Status LED	Status of Power ,Communication and CPU			
5	USB Port	USB Download Port			

E10TDAA / F12TAAA / F15TAAA



Outer Dimension

Model	Front		Side			Rear	
	F1	F2	S1	S2	S3	R1	R2
E10TDAA	270	212	58	199.9	49.8	257.9	199.9
F12TAAA	317	257	58	244.3	51	303.8	244.3
F15TAAA	366	296.5	58	283.5	51	352.8	283.8

Front Part Names and Specifications

No.	Title		Feature		
1	LCD	Model	E10TDAA	F12TAAA	F15TAAA
		Type	TFT 65, 536 Color LCD		
		Brightness	380 cd/m ² 350 cd/m ²	380 cd/m ²	350 cd/m ²
		Screen Size	26cm / 10.4inch	31cm / 12.1inch	38cm / 15inch
		Resolution	640 X 480	800 X 600	1024 X 768
2	Touch Panel	Touch Type	Analog		
3	Front Sheet	Front Vinyl Cover Sheet for Damp Proof and Dust Proof			
4	Status LED	Status of Power ,Communication and CPU			
5	USB Port	USB Download Port			

Specifications

Item	Model	F15TAAA	F12TAAA	E10TDAA	E05TDAA	E08TDAA	S07TDAA	S04TDAA
Power Supply	Input Voltage	AC (85-264V)		DC24V (20-28V)				
	Power Consumption	25W or less	20W or less	15W or less				
	Voltage Sag	Within 10ms		Within 10ms				
	Insulation Resistance	500V DC, 10 M ohm						
	Operation Temperature	0 ~ +50° C						
Environment	Storage Temperature							
& conditions (Physical/	Ambient Humidity	-10 ~ +60 C		85%RH or less		-20 ~ +60° C		
	Atmosphere	No corrosive gas						
Mechanical/	Vibration Endurance	Amplitude: 10<F<25Hz (2G) X, Y, Z direction for 30 minutes						
Electrical)	Noise Immunity	1500Vp-p (Pulse width 1s)		1000Vp-p (Pulse width 1s)				
	ESD Immunity	Contact : ±6KV		Conforms to IEC61000-4-2, Contact : ±4KV				
	Shock Endurance	10G, X, Y, Z direction for 3 times						
	Electricity Endurance	Confronting to IEC801-2						
	Ground Connection	Class 3 (100 ohm or less)						
	Protection Classification	Confronting to IP65 (*1)						

*1 : Although we confirm the IP65F conformity according to test standard of concern, we don't assure it in all conditions.

Driver List

Maker	Series	CPU Type	CPU Port	Link	(1:N)	Ethernet
LS	GLOFA-GM	Gm1/2/3/4/6/7	●	◆	●	●
	Master-K	10S1/10/30/60/100S	●	◆		
		80/120/200/300/1000S	●	◆	●	●
		60/200H	●			
		500(H)/1000	●	◆		
	XGT	XGI/XGR	●	◆	●	●
		XGK/XGB	●	◆	●	●
Samsung	FaraN	N70/700 alpha,7000	●	◆		
		NX70/700	●	◆		
	SPC	N70/700 plus	●			
Mitsubishi	Melsec-A	SPC-10/100/120S/300	●			
		A1N/2N/3N	●	◆	●	
		A1S(H)/2S(H)/AOJ2(H)	●	◆	●	
		A2A/3A/2A-S1	●	◆	●	
	Melsec-QnA	A2U/3U/4U/2USH	●	◆	●	
		Q2A/2AS/2ASH/3A/4AR	●	◆	●	●
		FX0/1/2/1S/1N/2N/2NC	●	◆	●	
		00/01/02/02H/06/12/25H	●	◆	●	●
Omron	SYSMAC C	C200H/200HS/500/1000	●			
		CQM1/1H	●	◆		
		CPM1/2A/2C	●	◆		
	SYSMAC CS	CS1G/1H	●	◆		●
	SYSMAC CJ	CJ1G/1M	●	◆		●
Rockwell (AB)	PLC5	PLC5/11/20/30/40/40L/60/60L	●			●
	SLC500	SLC5/03/04	●			●
	Control Logix	1756	●			●
	Compact Logix	1769	●			
	Micro Logix	1000 Series	●			
Siemens	SIMATIC5	90/95/100/115/135/155U		◆		
	SIMATIC57-200	212/214/215/216/221/222/224	●			
	SIMATIC57-300	312IFM/313/314/315/315-2DF	●	◆		●
	PC/HMI adapter		●			
GE-Fanuc	Fanuc 90-30	311/331	●	◆		
	Fanuc 90-70	731/732/771/772/781/782	●			
Hitachi	HIDIC-H	EH-150	●	◆	●	
		Micro EH	●		●	
Fuji	Micrex-F	F80/120H/250/120/140/150S		◆		
KEYENCE	KV	KV-700/1000	●			
KOYO	DL-205/305/405	D2240/330/430	●			
Matsushita	MEWNET	FPx	●	◆		
Modicon (Schneider)	Modbus	884/984A/984B/984X		◆	●	
		Slot-mount 984		◆	●	
	TWIDO	LCAA10/16/24DRF	●	◆	●	
		LMDA20/40DTK	●	◆	●	
		LMDA20/40DUK	●	◆	●	
		LMDA20DRT	●	◆	●	
Honeywell	Honeywell	Modbus TCP				●
Yaskawa	Honeywell	HC900	●		●	
	PROGIC-8	PROGIC-8	●		●	
	MP900	MP920/930	●		●	
Yokogawa	Control Pack	CP-9200SH		◆	●	
	FACTORY-ACE	FA-M3	●	◆		●

Maker	Series	CPU Type	CPU Port	Link	(1:N)	Ethnet
SAIA	SAIA	PCD2	●	◆		
Delta	DVP	DVP-ES	●			
FATEK	Facon FB	20MC	●			
Compile	Tiny	TCP32/37/9X	●			
POSCON	POSFA-A	POSFA-A		◆		
DDC	DDC	DDC	●		●	
Speedtech	DDC	ST/PS, ST/RS, ASIC/2-7040	●		●	
KDT	XP	CM1-XP1A/2A/3A/4A	●	◆		●
	CP	CM1-CP1A/2A/3A/4A	●	◆		
	BP	CM2-BP16/32	●	◆		
Emerson	EC20	EC20	●			

Inverter/MotionController

Maker	Series	CPU Type	CPU Port	Link	(1:N)	Type
LS	SV-iG5	SV-iG5	●		●	Inverter
ABB	ACS	ACS140/400/500	●		●	Inverter
Metronix	Anypack	Any pack	●		●	Servo
ROBOSTAR	Newro	RCS6000/RCM	●		●	Motion
DASA Tech	iMS-J	iMS-J	●		●	Motion
Delta-Tau	PMAC	Mini-PMAC	●			Motion
Emotiontek	MCU	MCU-MA/MP/XA/XP	●			Motion
	MCU2	MCU-MA2/MP2/XA2/XP2	●			Motion
	MCS	MCS-80A4/P4/A8/P8	●			Motion
Gidding & Lewis	MMC	MMC	●			Motion
Mistubishi	FX2N	FX2N-10/20GM	●			Motion
	MR	J3/J2/C/J2M/E	●			Servo
Rexroth Indramat	Visual Motion	Vm7, Vm8	●		●	Motion
Hyundai	Hi4	Hi4	●			Motion
IMO	Jaguar	CUB/VXSM/VXM	●			Inverter
Sanken	SAMCO-i	ihf/ipf/QS/lt/iF	●		●	Inverter
Huropec	HC	HC	●			Motion
FEBA	UDICON	UDICON	●		●	Motion
	SMARTCON	SMARTCON	●		●	Motion

Measurement

Maker	Series	CPU Type	CPU Port	Link	(1:N)	Type
AND	AD	AD4326/4327/4328/4329	●		●	Indicator
CHIMEI	CB920X	CB920X	●			Indicator
IMO	DTP	DTP				
Sewha	SI3000		●		●	Indicator
Yoko gawa	Temp Controller	ut/up/um	●			Temp Control
RKC	CB100Z	CB100/400/500/700/900Z	●		●	Temp Control
	SR-Mini		●		●	
Hanyoung	PX		●		●	Temp Control
	NX		●		●	
	UX100		●		●	
	MP3		●		●	Panel Meter

Other Automation Products

Lp1000 Relay



AC Servo System



AC Inverter Drives



DC Drives



PLCs



Soft Starters

