





EA7

Features

-  SENSOR
-  ENCODER
-  COUNTER
-  INFORMATION

Programmable Touch Panel

- Full line-up of TFT models from 5.7-inch to 15.0-inch
The 5.7-inch type has a STN black-and-white model.
- Screen transfer: Ethernet / USB
- PLC connection: Ethernet / Serial
- Screen storage media: Built-in memory / Expansion CF
- Sound output: Equipped as a standard
(Excluding the EA7-S6M-RS, EA7-S6M-RS)
- Protection level: IP65



[Common to all model number]
- Touch panel
- Analog resistive type
- CE marking compliant



Features

Various Files Can be Used.

Since various files such as image files (bmp) and audio files (wav) can be used, you can create more realistic screens.

Abundant Components

Various components can be graphically expressed.

Easy Downloads / Uploads

With no wasteful settings, you can immediately upload/download data by selecting a button. Owing to the USB and Ethernet connections, a long transfer time is not required.

Large-size Screen Display

The 15-inch screen can display large characters that are easily visible.

Simulation on Computer

Screen operation can be checked from a computer without the actual equipment. It is not necessary to prepare and connect the actual equipment to perform the simulation on the computer.

Password Setting

All patterns of password settings can be performed on one screen. Since the password can be set on eight levels, it is easy to create screens such as one that can be operated only by the administrator.

Multilingual Utilization

A combination of up to nine languages or fonts can be registered.*1 The characters displayed on the screen can be switched according to patterns. Since characters are only changed on the same screen, the number of screens can be minimized.

Supported languages: Japanese, Chinese, Taiwanese, English, Korean, Spanish and Thai

*1 When one language will be additionally used, the CF card needs to be added. (Example: Japanese and Chinese)

Use of Memory Cards

The data can be exchanged using a memory card. Since no computer is needed for the operation, the operator can work under reduced burden.

Use of CSV Files

Since the data managed by ViewJetCmore (tag, message, alarm, and language) can be stored and edited in CSV format, you can edit the data in a familiar environment.

View of the Display Screen

The screen data installed in the display can be viewed on computers and PDAs from a remote place. Other than the screen currently displayed, the backside screen can also be viewed.

Setting Up Connected Devices

The connections of ViewJetCmore or PLCs can be visually checked and set. The connected devices can be easily set without wondering what to do.

Software Outline

① 3 Step Bar

You can select what to do now from the start of a project to the mounting to displays by pressing the Step1 Start, Step2 Simulation, and Step3 Send buttons.

② Navigation Window

This window shows details of the screen, important menus of the ViewJetCmore software, etc.

③ Configuration Window

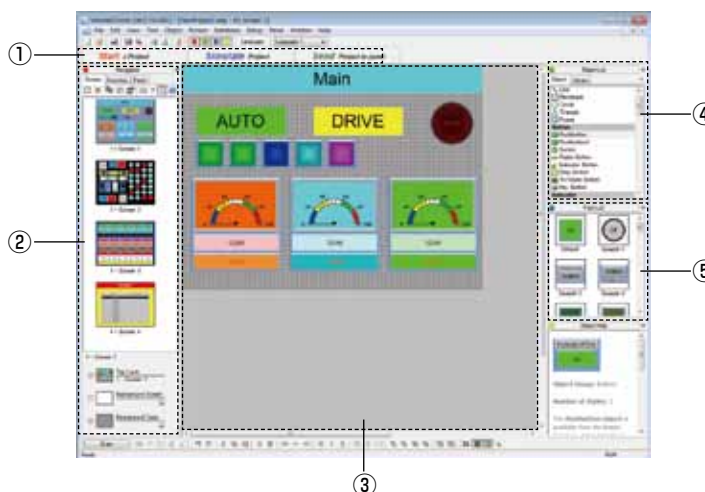
The components can be selected by pushing one button and can even be overlap. Enjoy the free space.

④ List Window

You can select from various components at a glance. By dragging components to the drawing window, you can create screens as you wish.

⑤ Parts List Window

This window shows parts design that corresponds to the list of objects.



HMI Lineup

Programmable
Touch Panel

HMI Software

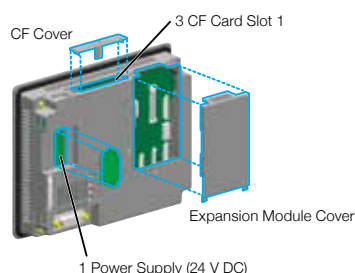
GC-A

GC-7

EA7

Each Part Names and Descriptions

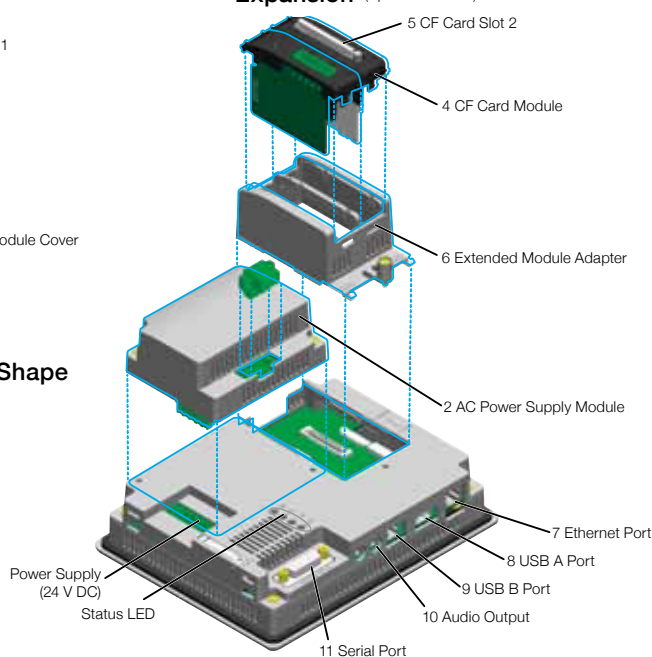
Standard Shape



Maximum Expansion Shape



Expansion (Option is installed)



- | | | |
|----|-------------------------|---|
| 1 | Power supply (24 V DC) | The slim body drives the display. |
| 2 | AC power supply module | Can drive the display around the world according to the environment. |
| 3 | CF card slot 1 | Used for uploading/downloading screen data and saving measured data. |
| 4 | CF card module | For saving larger-capacity data. (Option) |
| 5 | CF card slot 2 | Used for saving measured data. |
| 6 | Extended module adapter | Expansion-adapter for 4CF card modules. |
| 7 | Ethernet port | Enables screen data uploads/downloads, uploading of measured data, and connections with PLCs at high speed. |
| 8 | USB A port | Measured data can be saved in a USB memory that is convenient to carry around. |
| 9 | USB B port | Screen data can be uploaded/downloaded. The data can be exchanged comfortably at high speed. |
| 10 | Audio output | Notified not only by displayed alarms but also by sound. |
| 11 | Serial port | Makes connection with the PLC possible. |

Example of the Utility

- | | | |
|---|----------------|--|
| 3 | CF card slot 1 | [Example of data that can be used in CF cards] Screen data, Logging data |
| 5 | CF card slot 2 | [Example of data that can be used in CF cards] Logging data |
| 9 | USB A port | [Example of data that can be used in USB memories] Logging data |

Option

Name	Model Number	
AC Power Supply Module	EA-AC	
Extended Module Adapter	EA-EXP-OPT	
CF Card Module	EA-CF-IF	
D-sub Terminal Block Conversion Adaptor (For RS-422/485)	EA-COMCON-3	
D-sub Angle Conversion Adaptor	EA-ADPTR-4	
Surface Protection Sheet (Nonglare)	For 5.7-inch Type	EA-6-COV2
	For 8.4-inch Type	EA-8-COV2
	For 10.4-inch Type	EA-10-COV2
	For 12.1-inch Type	EA-12-COV2
	For 15.0-inch Type	EA-15-COV2
Anti-oil Cover	For 5.7-inch Type	EA-6-COV3-S
	For 8.4-inch Type	EA-8-COV3-S
	For 10.4-inch Type	EA-10-COV3-SG
	For 12.1-inch Type	EA-12-COV3
	For 15.0-inch Type	EA-15-COV3-S
Compact Flash	EA-CF-CARD	

Maintenance Product

(Provided with the Main Body When Purchased)

Name	Model Number	
Packing	For 5.7-inch Type	EA-6-GSK-S
	For 8.4-inch Type	EA-8-GSK-S
	For 10.4-inch Type	EA-10-GSK-SG
	For 12.1-inch Type	EA-12-GSK
	For 15.0-inch Type	EA-15-GSK-S
Battery	D2-BAT-1	
Plug for Main Body Power Supply	EA-DC-CON	
Plug for AC Power Supply	EA-AC-CON	
Mounting brackets for 5.7-inch (2 units)	EA-BRK-1	
Mounting brackets for 8.4-inch, 12.1-inch, and 15.0-inch type (8 units)	EA-BRK-2	

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Specifications

SENSOR

ENCODER

COUNTER

INFORMATION

Main Body Specifications

Model Number	EA7-S6M-RS		EA7-T6CL-RS		EA7-S6M-S		EA7-T6CL-S		EA7-T8C-S			
Display	Device Size	5.7-inch										
	Display Device	STN monochrome LCD		TFT color LCD		STN monochrome LCD		TFT color LCD		8.4-inch		
	Display Color/Gradation	15 gray gradations		65,536 color		15 gray gradations		65,536 color				
	Number of Dots	320 x 240 (QVGA)								640 x 480 (VGA)		
	Brightness Control	Set from the configuration screen of the main body display. (Setting components can be arranged from the drawing software.)										
	Backlight*1	Cold-cathode tube		LED		Cold-cathode tube		LED				
	Replacement of Backlight	Impossible								Possible		
	Automatic Turn-off Function	Set from the configuration screen of the main body display. (Can be set from the drawing software.)										
	Touch Panel	Analog resistive type, resolution: 1,024 W x 1,024 H										
Interfaces	For PLC Connection	Serial	Start-stop synchronization, RS-232C, RS-422/485 (2/4-wire system), D-sub 15-pin (Female) x 1*2 Data length: 7/8 bit, parity: None/Odd/Even, stop bit: 1/2 bit Transmission speed (bps): 2,400/4,800/9,600/19,200/38,400									
		Ethernet	No		Ethernet 10BASE-T/100BASE-TX (RJ-45, Category 5) x 1*3							
	Screen Data Transfer	USB	USB (B) 1.1 x 1									
		Ethernet	No		Ethernet 10BASE-T/100BASE-TX (RJ-45, Category 5) x 1*3							
	For Printer Connection	No										
	CF Card Slot 1	No				Compact Flash (Limited to 3.3 V) TYPE I/II x 1						
	CF Card Slot 2	No				Compact Flash (Limited to 3.3 V) TYPE I/II x 1 (Option)						
	Ethernet	No				Ethernet 10BASE-T/100BASE-TX (RJ-45, Category 5) x 1*3						
	USB	USB (A) 1.1 x 1*4										
	Line Output	No				Stereo output: Pin-jack x 1						
General Specifications	Supply Voltage	24 V DC (100/200 V AC power supply module is available as an option: EA-AC)										
	Allowable Power Range	20.4 to 28.8 V DC, allowable ripple, within 100 mVp-p, allowable instantaneous power failure time, within 5 ms										
	Allowable Instantaneous Power Failure Time	Within 5 ms										
	Power Consumption	9 W or lower		10 W or lower		10 W or lower		13 W or lower		15 W or lower		
	Use Ambient Temperature	0 to 50°C*5										
	Storage Ambient Temperature	-20 to 60°C										
	Use / Storage Ambient Humidity	10 to 85% RH (No condensation)										
	Noise Resistance	1000 V AC p-p, pulse width 1 μs, rise time 1 ns, between DC power supply input terminal and FG terminal (Cased on noise simulator)										
	Withstand Voltage	1000 V AC, 1 min, between DC power supply input terminal and FG terminal										
	Insulation Resistance	20 MΩ or higher (500 V DC), between DC power supply input terminal and FG terminal										
	Vibration Resistance	Comply with IEC61131-2, 10 to 57 Hz: 0.075 mm, 57 to 150 Hz: 9.8 m/s ² (10 times each for the X, Y, and Z direction)										
	Impact Resistance	Maximum 147 m/s ² , 11 ms (2 times each for the X, Y, and Z direction)										
	Electrostatic Discharge Resistance	Compliant with IEC61000-4-2, contact: 4 kV, air: 8 kV										
	Surrounding Atmosphere in Place of Use	No corrosive gases										
	Grounding	D-class grounding										
	Protective Structure	Equivalent to IP65 (Surface part)										
	Dimensions (mm)	191.0 W x 152.0 H x 43.1 D								258.5 W x 203.4 H x 52.1 D		
	Weight (g)	630		600		650		650		1,090		
	Panel Cutout Dimensions (mm)*7	179.0 W x 140.0 H								235.0 W x 179.7 H		
	Cooling System	Natural air-cooling										
Compliant Standards	UL508, EMC directive (CE marking; Self-declared), CE EN61131-2, EMI CISPR11 Class A, unnecessary radiation measurement, field intensity measurement, magnetic field strength measurement (EN55011) EMS susceptibility immunity measurement Class A EN61000-4-2 Electrostatic discharge immunity test, EN61000-4-3 Radiation magnetic field immunity test, EN61000-4-4 First transient burst immunity test, EN61000-4-5 Surge immunity test, EN61000-4-6 Conductivity immunity test											
Accessories	QSG (Quick Start Guide) manual Mounting brackets (2 units) Power plug								QSG (Quick Start Guide) manual Mounting brackets (6 units) Power plug			

Software Requirements

Personal Computer	Models for which Windows normally operates (PC/AT compatibles), Pentium II 333 MHz or higher are recommended.
OS	Japanese/English Microsoft Windows 2000 with Service Pack 4 (SP4) or Windows XP(Home Edition/Professional Edition), Windows Vista (32-bit version)/Windows 7 (32-bit version)
Resolution	XGA 1,024 x 768 or higher is recommended
HD disc free space	Free space of 300 MB or more (600 MB or more is recommended.)
Memory	Equipped with 128 MB (512 MB or more is recommended.)
Disc Drive	CD-ROM drive
Network Environment	TCP/IP protocol

* The computer must have a USB (A) port or Ethernet port.

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Specifications

List of Connected Devices

Device	Manufacturer	PLC Series	CPU Direct Connection	Serial Module	Ethernet Module	
PLC	Koyo	DL05/06/205 (Ethernet requires an ECOM module.)	○	○	○	
		KOSTAC D4 series (Ethernet requires an ECOM module.)	○	○	○	
		PZ series, SJ series	○	—	—	
		KOSTAC D3 series	—	○	—	
	Mitsubishi	FX series, Q series*1	CPU direct connection	○	—	—
		FX series, A series, Q series, QnA series	Computer link	—	○	—
		A series, Q series, QnA series	Ethernet interface unit	—	—	○
	Omron	C series	HostLink	—	○	—
		CS series, CJ series	CPU unit built-in port	○	—	—
		CS series	Link unit	—	○	—
		C series	PC card unit	—	—	○
		CS series	Ethernet unit	—	—	○
	Panasonic	FP series		—	○	—
		FP series	ET-LAN unit	—	—	○
	Yokogawa	FA-M3 series	Serial communication module, CPU port	—	○	—
		FA-M3 series	Ethernet	—	—	○
	Keyence	KZ series, KV series	Link unit, CPU direct connection	○	○	—
		KV series (KV-700/1000)	CPU direct connection	○	—	—
		KV series (KV-3000/5000)		○	○	○
	JTEKT	TOYOPUC PC2/PC3 series	Serial	—	○	—
		TOYOPUC PC2/PC3 series	Ethernet	—	—	○
		TOYOPUC PC10G series		○	—	—
	Sharp	JW-20 JW-30 JW-50/70/100 series	Communication module	—	○	—
		JW-20 JW-30 JW-50/70/100 series	Ethernet module	—	—	○
	Toshiba	Prosec T, V series	Serial	—	○	—
		Prosec T, V series	Ethernet	—	—	○
	Toshiba Machine	TCmini, TC200		—	○	—
	Yaskawa	GL, MP, CP series	Serial	—	○	—
		GL, MP, CP series	Ethernet	—	—	○
	AB	MicroLogix 1000/1200/1500, SLC 500, 5/01, /02, /03	(DH485)	—	○	—
		MicroLogix 1000, 1200, 1500	(DF1)	—	○	—
		SLC 5/03, /04, /05, PLC-5	(w/DF1)	—	○	—
	Entivity (Think&Do)	H2-WinPLC	(Modbus, Ethernet)	—	○	○
GE	90/30, 90/70		—	○	—	
Modicon	984 CPU, Quantum 113 CPU, AEG Modicon Micro Series		—	○	—	
	110 CPU: 311-xx, 411-xx, 512-xx, 612-xx		—	○	—	
Siemens	S7-200PPI, S7-300MPI		—	○	○	
	Modbus TCP/IP	Modbus TCP/IP devices	—	—	○	
	Generic EtherNet/IP	EtherNet/IP (AB ENET IP)	—	—	○	
CNC	FANUC	18i-LNB series (CNC)	○	—	—	
Temperature Control	Azbil Corporation	SDC36/26 (Temperature controller)	—	○	—	
	RKC INSTRUMENT INC.	CB100 (Temperature controller)	—	○	—	

For the details about supported PLCs, contact our customer support center.

*1 The Q00CPU, Q00JCPU, and Q01CPU are not supported.

Barcode Reader

Only barcode readers with a USB keyboard interface can be used. The following barcode reader was already tested by Koyo Electronics.

Manufacturer	Model Number
Symbol Technology	LS2208

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Dimensions

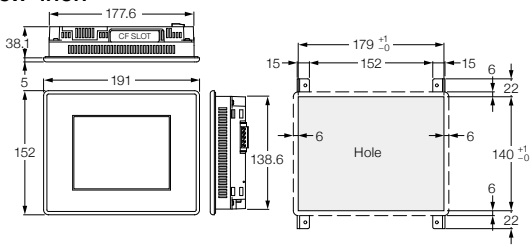
- PLC
- HMI**
- SENSOR
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- HMI Lineup
- Programmable Touch Panel
- HMI Software

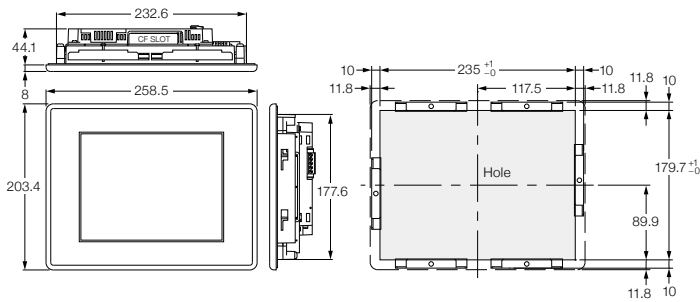
- GC-A
- GC-7
- EA7**

Dimensions

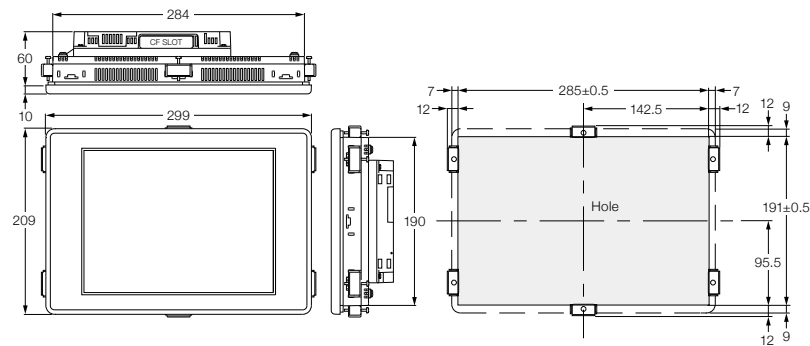
5.7-inch



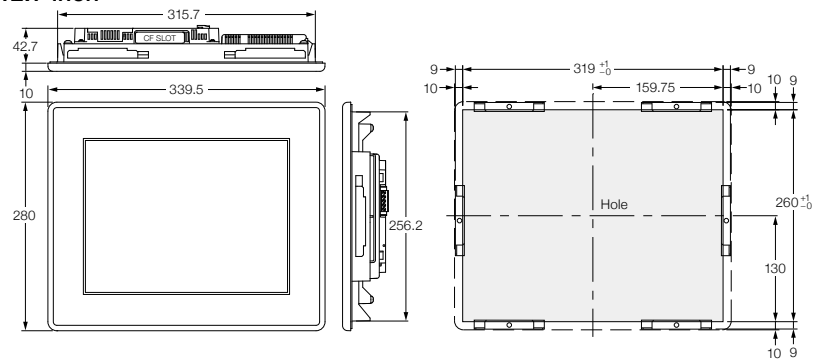
8.4-inch



10.4-inch



12.1-inch



15.0-inch

