

# eXP2 Series

Human Machine Interface





eXP2-04  
4.3"

eXP2-07  
7"

# Human Machine Interface new eXP2 Series

**Performance  
Enhancement**  
(eXP → eXP2)



Project Downloading



Screen Change



Booting



Graphic Rendering

※ The above may vary depending on the conditions of use.



eXP2-10  
10.1"



eXP2-05  
5.6"

## More Convenient Control

User-oriented interface, more powerful performance, fast screen changes and high levels of responsiveness.



**Quick and Fast**  
Fast screen change & booting



**Cortex A8**  
800MHz CPU



**Communication Driver**  
Various comm. drivers (continuously being added)



**Micro SD Card Support**  
Advanced model only for 7" & 10"



**Compatibility**  
Compatible with eXP (panel cut, project file, etc.)



**LCD Life Time**  
Increased by 2.5 times

## Portrait Mode



- Vertical mounting is available
- Setting in XP-Builder: [COMMON]-[Project Property Setting]

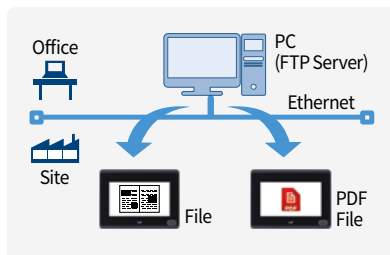
Item	eXP	eXP2
Vertical Mode	eXP20 Only	0
PDF Viewer	X	0
FTP Client	X	0
VNC Client	X	0

## PDF Viewer



- PDF files can be displayed on XGT Panel.
- In the event of an alarm, the content of the alarm's trouble shooting can be checked on site as a PDF file.
- PDF files on an FTP server can be displayed using a PDF viewer object.

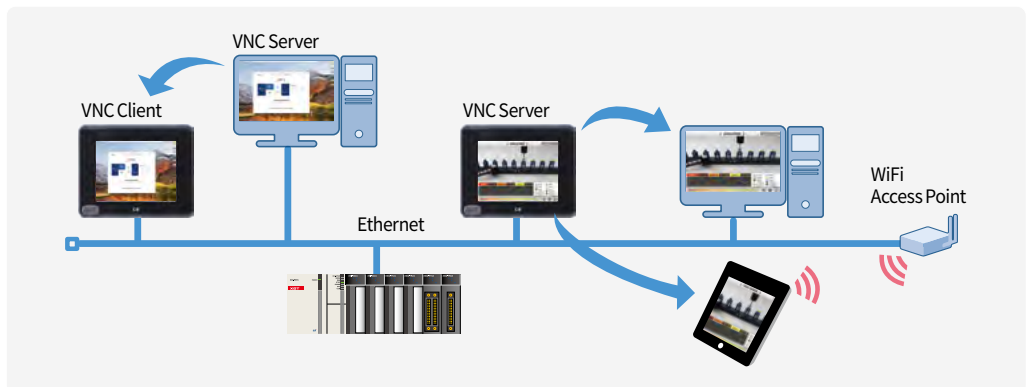
## FTP Client



- FTP client is an object that can connect to the FTP server, display the list of files and directories on the FTP server, and download the selected file.
- PDF files on an FTP server can be displayed using a PDF viewer object.

## VNC Viewer

- Remotely monitoring PC or HMI using VNC Viewer is available
  - Download VNC server to HMI using XP-Manager.
  - Install a universal VNC server on your PC.(Ultra VNC, Real VNC, etc.)
- Add 'VNC Viewer' object to the project screen.



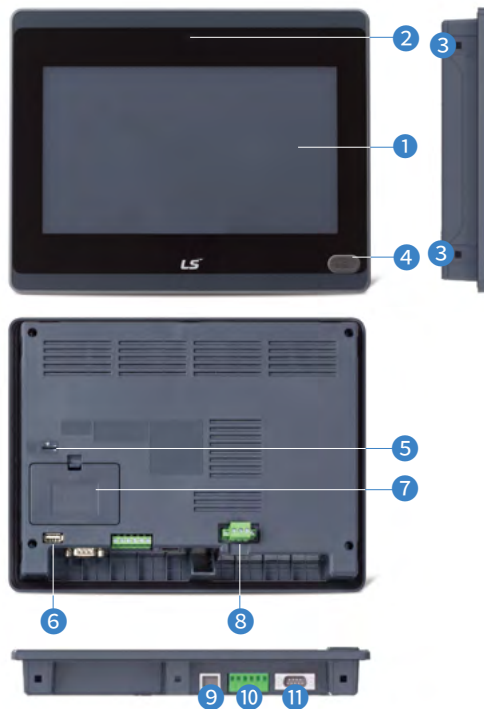
## Model Naming

<b>eXP</b>	<b>2</b>	<b>04</b>	<b>0</b>	<b>0</b>	<b>D</b>	<b>EX</b>	
①	②	③	④	⑤	⑥	⑦	
<b>① Series</b>			<b>⑤ Communication/SD Memory</b>				
efficient XGT Panel			0	Standard Model: RS-232C/RS-485/RS-422/Ethernet			
<b>② Generation</b>			1	Advanced Model: RS-232C/RS-485/RS-422/Ethernet/Micro SD <sup>*1)</sup>			
2nd Generation			2	Basic Model: RS-232C/RS-485/RS-422 <sup>*2)</sup>			
<b>③ LCD Size</b>			<b>⑥ Power</b>				
04	10.9cm (4.3")		D				DC24V
05	14.2cm (5.6")		<b>⑦ Certifications</b>				
07	17.8cm (7")		EX				IP66, UL Type 4X
10	25.5cm (10.1")						
<b>④ OS Type</b>							
0	WinCE 7.0(Core)						
1	WinCE 7.0(Pro)						

\*1) Advanced Model: 07/10 model only

\*2) Basic Model: 05/07 model only

## Hardware Description



- ① Front Screen**
  - Analog Touch panel
- ② Power Status LED**
  - HMI status indication (On: Blue)
- ③ Panel Mounting Hole**
  - Mounting bracket

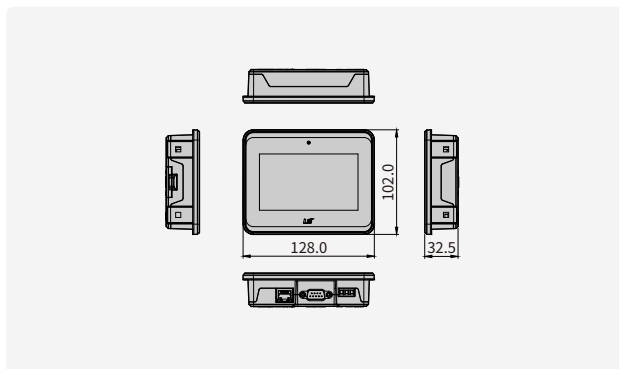
- ④ USB Device**
  - Logging/Recipe/Screen data backup
  - Download/Upload project
  - Upload project file
  - XGT Panel update
- ⑤ Micro SD Card**
  - Backup of data such as alarm/logging/recipe and storage of screen data
  - Send/Receive project data, Send XP-runtime
- ⑥ USB Host**
  - USB memory connection: logging/recipe/screen data backup
  - Project data transfer/backup
  - User interface connection: mouse/keyboard
  - Printer connection
- ⑦ Battery Cover**
  - Reset switch, Backup battery, Setting switch
  - \* Please refer to user's manual.
- ⑧ Power Terminal**
  - Power input (24VDC)
- ⑨ Ethernet Terminal**
  - Ethernet : 10Base-T/ 100Base-TX
  - 1) Send project data
  - 2) Receive backup data and project file
  - 3) Send XP-Runtime
  - 4) PLC/Control device communication
- ⑩ COM3 Connector**
  - RS-422/485: PLC or control device communication
- ⑪ COM1, COM2 Connector**
  - RS-485, RS-232C: PLC or control device communication



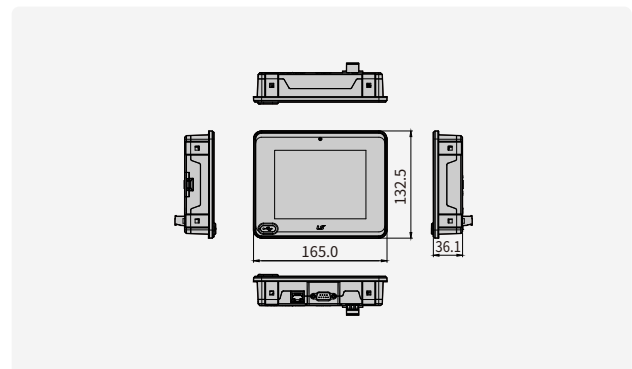
Item	eXP2-04□*0D	eXP2-05□*0D	eXP2-05□*2D
Display Type	TFT color LCD		
Screen Size	10.9cm (4.3")	14.2cm (5.6")	
Display Resolution	480 x 272 Pixel	640 x 480 Pixel	
Color Indication	24Bit Color (16.7M)	18Bit Color (65,536)	
Indication Degree	Left/Right: 60 deg. Upper: 40 deg. Lower: 50 deg.	Left/Right: 60 deg. Upper: 40 deg. Lower: 60 deg.	
Backlight	LED Type (Supports Backlight Auto-off Function)		
Backlight Duration	50,000 Hours	20,000 Hours	
Touch Panel	4-Wire Resistive, Analog		
Audio Output	Magnetic Buzzer (85dB)		
Process	800MHz		
Memory	Drawing Memory	64MB	
	Operating RAM	512MB	
	Backup RAM	128KB	
Backup Data	Date/Hour Data, Logging/Alarm/Recipe Data and Nonvolatile Device		
Battery Life	Approx. 3 years (Operating Ambient Temperature of 50°C)		
Ethernet	1 Channel, IEEE802.1a, 10Base-T/100Base-TX	-	
USB Host	1 Channel, USB 2.0 Host (Mouse, keyboard, printer, USB flash drive, etc.)		
USB Device	-	1 Channel, USB 2.0 Device (for Download and Upload Project)	
Micro SD Card	-	-	
RS-485, RS-232C	1 Channel, RS-232C (DSUB 9/Male Type)		
RS-422/485	1 Channel, RS-422/485 (DSUB 9/Male Type)		
Multi-language	Up to 12 Language Simultaneously		
Animation	GIF Format is Available		
Recipe	Available		
Data Logging	Available		
Script Executor	Available		
Certifications	CE, UL(cUL), UL Type 4X, KC	CE, UL(cUL), UL Type 4X, KC	CE, UL(cUL), KC
Protection Standard	IP65 <sup>Note 1)</sup>		
Dimension (mm)	128 x 102 x 32.5	165 x 132.5 x 36.1	
Panel Cut (mm)	119 x 93	156 x 123.5	
Rated Voltage	DC24V		
Power Consumption (W)	4	5.5	5.5
Weight (kg)	0.27	0.43	0.43

□\*: 0 (WinCE 7.0 Core), 1 (WinCE 7.0 Pro)  
 Note 1) IP66 for UL Type 4X models.

### eXP2-04 (4.3")



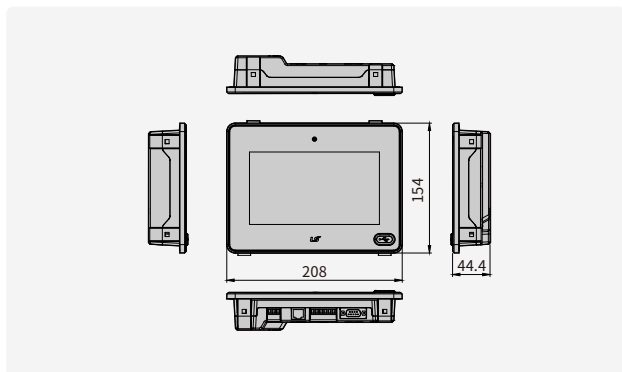
### eXP2-05 (5.6")



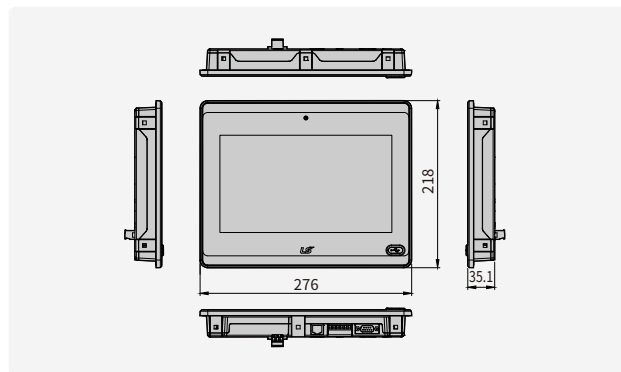


eXP2-07□*0D	eXP2-07□*1D	eXP2-07□*2D	eXP2-10□*0D	eXP2-10□*1D
	TFT Color LCD		TFT Color LCD	
	17.8cm (7")		25.9cm (10.1")	
	800 x 480		1024 x 600	
	24Bit Color (16.7M)		24Bit Color (16.7M)	
	Left/Right: 70 deg. Upper: 50 deg. Lower: 70 deg.		Left/Right: 70 deg. Upper: 50 deg. Lower: 70 deg.	
	LED Type (Supports Backlight Auto-off Function)		LED Type (Supports Backlight Auto-off Function)	
	50,000 Hours		30,000 Hours	
	4-Wire Resistive, Analog		4-Wire Resistive, Analog	
	Magnetic Buzzer (85dB)		Magnetic Buzzer (85dB)	
	800MHz		800MHz	
	64MB		64MB	
	512MB		512MB	
	128KB		128KB	
	Date/Hour Data, Logging/Alarm/Recipe Data and Nonvolatile Device Approx. 3 years (Operating Ambient Temperature of 25°C)		Date/Hour Data, Logging/Alarm/Recipe Data and Nonvolatile Device Approx. 3 years (Operating Ambient Temperature of 50°C)	
	1 Channel, IEEE802.1a, 10Base-T/100Base-TX	-	1 Channel, IEEE802.1a, 10Base-T/100Base-TX	
	1 Channel, USB 2.0 Host (Mouse, keyboard, printer, USB flash drive, etc.)		1 Channel, USB 2.0 Host (Mouse, keyboard, printer, USB flash drive, etc.)	
	1 Channel, USB 2.0 Device (for Download and Upload Project File)		1 Channel, USB 2.0 Device (for Download and Upload Project File)	
	-	1 Channel SDHC Class10	-	1 Channel SDHC Class10
	2 Channels, RS-485, RS-232C (DSUB 9/Male Type)		2 Channels, RS-485, RS-232C (DSUB 9/Male Type)	
	1 Channel, RS-422/485 Mode (Terminal Type)		1 Channel, RS-422/485 Mode (Terminal Type)	
	Up to 12 Language Simultaneously		Up to 12 Language Simultaneously	
	GIF Format is Available		GIF Format is Available	
	Available		Available	
	Available		Available	
	Available		Available	
	CE, UL(cUL), UL Type 4X, KC	CE, UL(cUL), KC	CE, UL(cUL), UL Type 4X, KC	
	IP65 <sup>Note 1)</sup>		IP65 <sup>Note 1)</sup>	
	208 x 154 x 44.4		276 x 218 x 35.1	
	192 x 138		260 x 202	
	DC24V		DC24V	
	6		6	
0.59	0.59	0.58	1.0	1.0

eXP2-07 (7")



eXP2-10 (10.1")





### Safety Instructions

- For your safety, please read user's manual thoroughly before operating.
- Contact the nearest authorized service facility for examination, repair, or adjustment.
- Please contact qualified service technician when you need maintenance. Do not disassemble or repair by yourself!
- Any maintenance and inspection shall be performed by the personnel having expertise concerned.



- According to The WEEE Directive, please do not discard the device with your household waste.



[www.ls-electric.com](http://www.ls-electric.com)

#### ■ Headquarter

LS-ro 127(Hogye-dong) Dongan-gu, Anyang-si, Gyeonggi-Do, 14119, Korea

#### ■ Seoul Office

LS Yongsan Tower, 92, Hangang-daero, Yongsan-gu, Seoul, 04386, Korea  
Tel: 82-2-2034-4033, 4888, 4703 Fax: 82-2-2034-4588  
E-mail: automation@ls-electric.com

#### ■ Overseas Subsidiaries

- **LS ELECTRIC Japan Co., Ltd. (Tokyo, Japan)**  
Tel: 81-3-6268-8241 E-Mail: japan@ls-electric.com
- **LS ELECTRIC (Dalian) Co., Ltd. (Dalian, China)**  
Tel: 86-411-8730-6495 E-Mail: china.dalian@lselectric.com.cn
- **LS ELECTRIC (Wuxi) Co., Ltd. (Wuxi, China)**  
Tel: 86-510-6851-6666 E-Mail: china.wuxi@lselectric.com.cn
- **LS ELECTRIC Middle East FZE (Dubai, U.A.E.)**  
Tel: 971-4-886-5360 E-Mail: middleeast@ls-electric.com
- **LS ELECTRIC Europe B.V. (Hoofddorp, Netherlands)**  
Tel: 31-20-654-1424 E-Mail: europartner@ls-electric.com
- **LS ELECTRIC America Inc. (Chicago, USA)**  
Tel: 1-800-891-2941 E-Mail: sales.us@lselectricamerica.com
- **LS ELECTRIC Turkey Co., Ltd.**  
Tel: 90-212-806-1225 E-Mail: turkey@ls-electric.com

#### ■ Overseas Branches

- **LS ELECTRIC Tokyo Office (Japan)**  
Tel: 81-3-6268-8241 E-Mail: tokyo@ls-electric.com
- **LS ELECTRIC Beijing Office (China)**  
Tel: 86-10-5095-1631 E-Mail: china.auto@lselectric.com.cn
- **LS ELECTRIC Shanghai Office (China)**  
Tel: 86-21-5237-9977 E-Mail: china.auto@lselectric.com.cn
- **LS ELECTRIC Guangzhou Office (China)**  
Tel: 86-20-3818-2883 E-Mail: china.auto@lselectric.com.cn
- **LS ELECTRIC Chengdu Office (China)**  
Tel: 86-28-8670-3201 E-Mail: china.auto@lselectric.com.cn
- **LS ELECTRIC Qingdao Office (China)**  
Tel: 86-532-8501-2065 E-Mail: china.auto@lselectric.com.cn
- **LS ELECTRIC Nanjing Office (China)**  
Tel: 86-25-8467-0005 E-Mail: china.auto@lselectric.com.cn
- **LS ELECTRIC Bangkok Office (Thailand)**  
Tel: 66-90-950-9683 E-Mail: thailand@ls-electric.com
- **LS ELECTRIC Jakarta Office (Indonesia)**  
Tel: 62-21-2933-7614 E-Mail: indonesia@ls-electric.com
- **LS ELECTRIC Moscow Office (Russia)**  
Tel: 7-499-682-6130 E-Mail: info@lselectric-ru.com
- **LS ELECTRIC America Western Office (Irvine, USA)**  
Tel: 1-949-333-3140 E-Mail: america@ls-electric.com