

Micro Human Machine Interface

## XGT Panel

Next Generation Micro HMI with Various Displays



Automation Equipment



**LS** Industrial Systems

New Name of  LG Industrial Systems



**HMI Innovation!**

## Minimum-sized XGT Panel

### Programming Innovation

Due to full-featured GUI programming tool, anybody can configure a system easily.

### Low-Cost Innovation

LSIS know-how-driven high functions reinforce your cost-competitiveness with economic HMI.

### Performance Innovation

High functions and reliability beyond the limit of general compact-sized HMIs can realize system operation at its maximum

When you use **XGT Panel**,  
you are to experience the followings:

### Wire Reduction

Replacing complicated wiring by communication line, it is a lot easier to do maintenance work.

### Control Panel Downsizing

Thanks to XGT Panel functioning data display, input, output switch and lamp, control panel downsizing is accomplished.

### Cost Down

Since I/Os and analog signals are managed by communication, PLC modules and other related equipment would be needless.



### Enhancing User-friendliness

- Flexible to draw: 192 X 64 Dot Graphic LCD
- Easy to upgrade: O/S and font download
- Various tag/drawing functions support: 15 types
- Easy to manage data: internal memory (1000 words) support
- User-defined function keys support for each screen (F1~F4, ◀, ▶, ▲, ▼)
- User-defined bitmap file input support
- Region-based upload/download support
- Built-in RTC: B Type
- Large screen memory: 256K

### Flexible to supply power

- 5V supply by loader port for LS PLC and INV connection
- DC 24V supply from DC 24V input terminal

### Language support

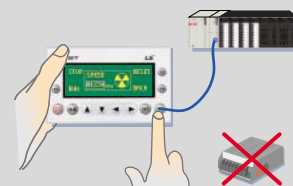
- English, Chinese, Korean
- Font-download adoption support

### Strong communication functions

- Separate 2Ch support: RS-232C and RS-422/485
- Multi master communication (N:M) support
  - Monitoring M PLCs with N GLOFA PANELs

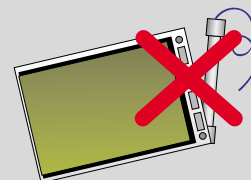
### Handy Monitoring Function

Thanks to 5V power supply through the loader port (LS PLC and LS VFD within 2 meters), XGT Panel runs without external DC24V. XGT Panel is portable and easy to configure and maintain.



### Long-life backlight LED adoption

Low current consumption of LED backlight enables no need of backlight exchange, lengthening product life and convenient maintenance (It would be susceptible to installing conditions and environment).



### Various communication modes and protocol driver supply

- LS PLC: loader and link (Cnet)
- LS VFD: loader (iS5/iP5(A)/iV5) and RS-485
- MODBUS ASCII/RTU protocol
- Mitsubishi FX series
- OMRON C-mode protocol

\* Communication drivers are added and updated.



neXt  
Generation  
Technology

One step upgraded  
system with XGT  
Panel enhances your  
competitiveness.

### System Functions

#### 1:1 configuration



Basic 1:1 configuration using  
RS-232C/RS-422/485

### Application System

#### Unit Equipment



Used in textile, packaging, injection machines

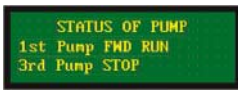


## Main Functions XGT Panel



### Digit Tag

Data input and display



### Message Display Tag

Changeable message display for each device value



### Lamp Tag

Lamp display (circle and square)



### Graph Tag

Variable graph display such as bar, trend, and pie graph.



### Rotate/Move Tag

Dynamic expression of object according to device value



### BITMAP Display

Easy registration and display of bitmap file in 192 × 64 (max.)



### Alarm Record Management

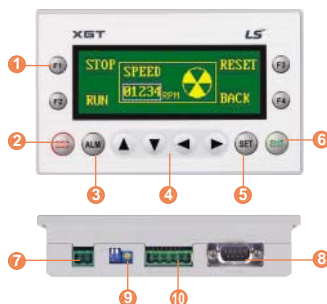
Immediate alarm display concerning system errors (history record: up to 20)



### Reservation

Using RTC functions, taking a certain action according to designated time (schedule: up to 20)

## Appearance and Functions XGT Panel



- ① Function keys: Bit/Drive Out/Increment/Decrement/Screen
- ② ESC: Input Cancelling
- ③ ALM: Alarm History
- ④ Arrow Keys: Bit/Drive Out/Increment/Decrement/Screen
- ⑤ SET: PLC Data Input Set-up
- ⑥ ENT: PLC Data Input ENTER
- ⑦ DC24V Power Supply
- ⑧ RS-232C port for downloading/communication
- ⑨ Screen Luminance Adjustment Set-up
- ⑩ RS-422 Port

## Easy Drawing Tool Panel Editor



### ■ Drawing Tool

Enhanced user-friendliness by diverse drawing functions (line, circle, square, etc)

### ■ Simple Memory Management

Easy recognition of the current memory usage

### ■ Easy Programming

One click on tag for instant drawing and editing

### ■ Print Function

Each screen print function support: available from version 1.1

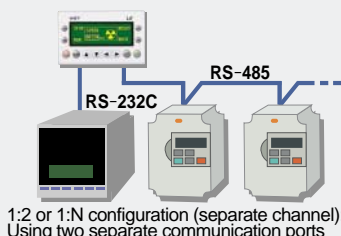
### ■ Direct Device Input

Directly inputting device name

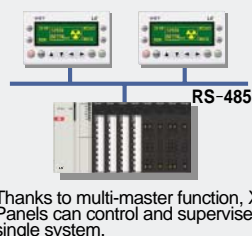
### ■ Snap/Align functions

Enhanced drawing easiness: snag and align functions

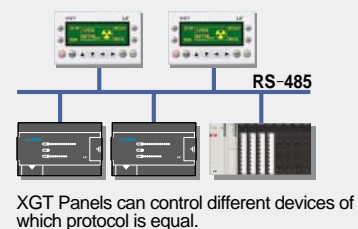
### 1:2 or 1:N configuration



### N:1 configuration



### N:M configuration



### VFD Loader



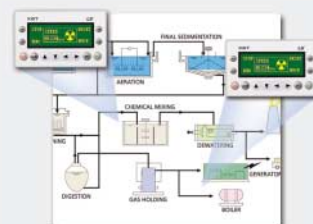
Used as graphic loader. Regarding LSIS VFD connection, an extra loader cable will do within 2 meters.

### Building Automation Equipment



Used to monitor/control data in automatic parking system, HVAC, elevators, etc.

### Process Automation



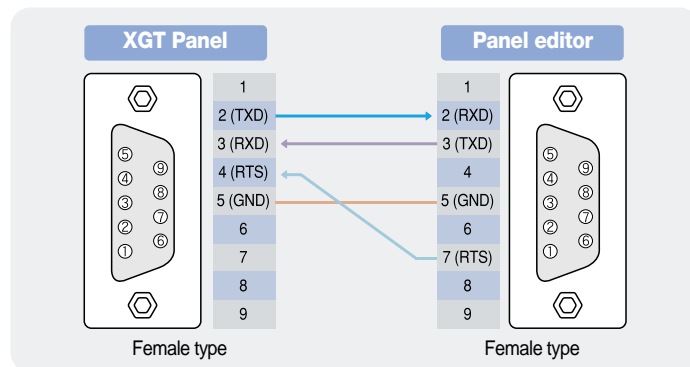
Used to configure a supervisory system (water treatment).

## Specifications

### Performance specifications

Item	Specifications		Remark
	XP10BKA/DC	XP10BKB/DC	
Input power	4.9~5.1VDC (RS-232C connector), 21.6V~26.4VDC (Power supply connector)		
Display	LED Back-light (192 × 64 Dot)		
Communication Interface	RS-232C, RS-422/485		Separate 2 channels
Memory	256K		
Languages	English, Chinese, Korean		
RTC	None	Supports	
Up/Download spec.	Speed 115,200bps Each memory area can be up/downloaded in part		
Keys	12keys (F1~F4, ESC, ALM, ▲, ▼, ◀, ▶, SET, ENT)		
System memory	User area	M000~M899 (900 words)	Latch area is supported, in XP10BKB/DC
	System flags	M900~M999 (100 words)	

### Cable connection for program downloading



### General specifications

Item	Specifications			Standard		
Operating temperature	0℃ ~+40℃ (32℉ ~104℉)					
Storage temperature	-10℃ ~+50℃ (14℉ ~122℉)					
Operating humidity	5~95%RH, non-condensing					
Storage humidity	5~95%RH, non-condensing					
Vibration	Occasional vibration			Sweep count	10 times in each direction for X, Y, Z	IEC61131-2
	Frequency	Acceleration	Amplitude			
	10≤f<57Hz	-	0.075mm			
	57≤f≤150Hz	9.8m/s²	-			
	Continuous vibration					
	Frequency	Acceleration	Amplitude			
	10≤f<57Hz	-	0.0375mm			
	57≤f≤150Hz	4.9m/s²	-			
Shocks	Maximum shock acceleration: 147m/s² (15G) Duration time: 11ms Pulse wave: half sine wave pulse				IEC61131-2	
Noise immunity	Square wave impulse noise		±500V		LSIS Standard	
	Electrostatic discharge		Voltage: 4kV (contact discharge)		IEC61131-2, IEC1000-4-2	
	Radiated electromagnetic field		27~500MHz, 10V/m		IEC61131-2, IEC1000-4-3	
	Fast transient /Burst noise		Voltage	1kV/0.25kV	IEC61131-2, IEC1000-4-4	
Atmosphere	Free from corrosive gases and excessive dust					
Altitude for use	Up to 2,000m					
Pollution degree	2 or lower					
Cooling method	Air-cooling					

### Line-up

Part number	Specifications
XP10BKA/DC	4.1", Mono, RS-232C, RS-422/485
XP10BKB/DC	4.1", Mono, RS-232C, RS-422/485, <b>RTC</b>

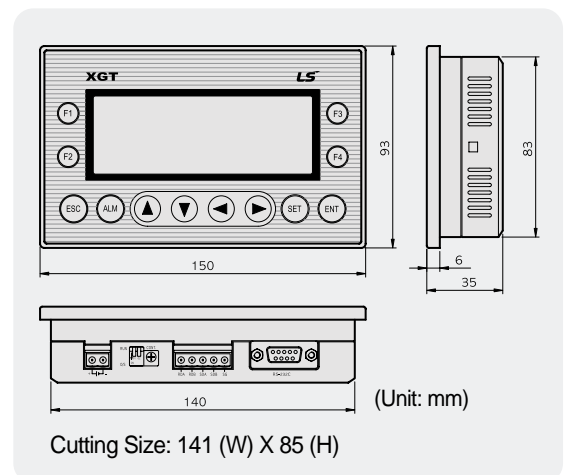
### Communication drivers to support

Item		Device	Driver	
LS	PLC	MASTER-K	LOADER	LINK (CNET)
		GLOFA-GM	LOADER	LINK (CNET)
	INV	SV-IC5	-	MODBUS
		SV-IG5/IG5A	-	RS-485, MODBUS
		SV-IS5	LOADER	RS-485, MODBUS
		SV-IP5/IP5A	LOADER	RS-485, MODBUS
		SV-IV5	LOADER	-
		SV-IH	-	RS-485

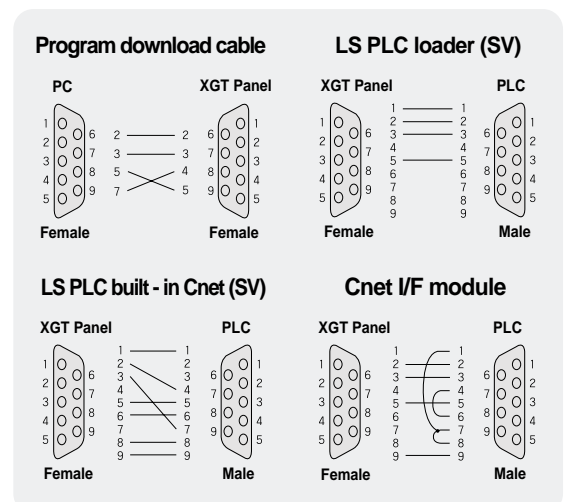
Others	MITSUBISHI FX Series		
	OMRON C-mode		
MODBUS	Master	RTU	ASC
	Slave	RTU	ASC

\* Drivers are continually updated

### Dimensions



### Cable connection



\* For more information, refer to user's manual

## Leader in Electrics & Automation



### 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 a 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.

## LS Industrial Systems Co., Ltd.

[www.lsis.biz](http://www.lsis.biz)

### ■ HEAD OFFICE

Yonsei Jaedan Severance Bldg. 84-11, 5ga, Namdaemun-ro,  
Jung-gu, Seoul 100-753, Korea

Tel. (82-2)2034-4870

Fax. (82-2)2034-4713

<http://www.lsis.biz>

### ■ FACTORY

181 Samsung-Ri, Mokchon-eup Chonan-Si, Chungnam  
330-845, Korea

### ■ Global Network

- **LS Industrial Systems Tokyo Office Japan**  
Address: 16F, Higashi-Kan, Akasaka Twin Towers 17-22, 2-chome,  
Akasaka, Minato-ku Tokyo 107-8470, Japan  
Tel: 81-3-3582-9128 Fax: 81-3-3582-0065 e-mail: [dongjins@lsis.biz](mailto:dongjins@lsis.biz)
- **LS Industrial Systems Dubai Office UAE**  
Address: P.O.Box-114216, API World Tower, 303B, Sheikh Zayed road, Dubai, UAE.  
Tel: 971-4-3328289 Fax: 971-4-3329444 e-mail: [hwyim@lsis.biz](mailto:hwyim@lsis.biz)
- **LS-VINA Industrial Systems Co., Ltd Vietnam**  
Address: LSIS VINA Congty che tao may dien Viet-Hung Dong Anh Hanoi, Vietnam  
Tel: 84-4-882-0222 Fax: 84-4-882-0220 e-mail: [srjo@hn.vnn.vn](mailto:srjo@hn.vnn.vn)
- **LS Industrial Systems Hanoi Office Vietnam**  
Address: Room C21, 5Th Floor, Horison Hotel, 40 Cat Linh , Hanoi, Vietnam  
Tel: 84-4-736-6270/1 Fax: 84-4-736-6269
- **Dalian LS Industrial Systems Co., Ltd China**  
Address: No. 15 Liaohexi 3 Road, economic and technical  
development zone, Dalian, China  
Tel: 86-411-8731-8210 Fax: 86-411-8730-7560 e-mail: [youngeel@lsis.biz](mailto:youngeel@lsis.biz)
- **LS Industrial Trading (Shanghai) Co., Ltd China**  
Address: Room 1705-1707, 17th Floor Xinda Commercial Building No 322,  
Xian Xia Road Shanahai, China  
Tel: 86-21-6252-4291 Fax: 86-21-6278-4372 e-mail: [hgseo@lsis.biz](mailto:hgseo@lsis.biz)
- **LS Industrial Systems Beijing Office China**  
Address: Room 303, 3F North B/D, EAS 21 XIAO YUN ROAD,  
Dong San Huan Bei Road, Chao Yang District, Beijing, China  
Tel: 86-10-6462-3259/4 Fax: 86-10-6462-3236 e-mail: [sclim@mx.cei.gov.cn](mailto:sclim@mx.cei.gov.cn)
- **LS Industrial Systems Shanghai Office China**  
Address: Room 1705-1707, 17th Floor Xinda Commercial Building  
No 318, Xian Xia Road Shanahai, China  
Tel: 86-21-6278-4370 Fax: 86-21-6278-4301 e-mail: [sdhwang@lsis.biz](mailto:sdhwang@lsis.biz)
- **LS Industrial Systems Guangzhou Office China**  
Address: Room 303, 3F, Zheng Sheng Building, No 5-6, Tian He  
Bei Road, Guangzhou, China  
Tel: 86-20-8755-3410 Fax: 86-20-8755-3408  
e-mail: [lsisgz@public1.guangzhou.gd.cn](mailto:lsisgz@public1.guangzhou.gd.cn)

Specifications in this catalog are subject to change without notice due to  
continuous product development and improvement.