



E6. HMIs

HMIs provide users with an interface to directly interact with machines in order to control and monitor various processes.

E6-1	Logic Panels	LP-A Series	Color LCD Logic Panels
E6-2	Graphic Panels	GP-A Series	Color LCD Graphic Panels

Color LCD

Logic Panels

LP-A Series



Features

- Equipped with TFT LCD for realizing True color
- Easier system configuration and use with PLC, HMI, I/O all-in-one design
- Horizontal / Vertical installation according to environment
- Available to monitor device of the connected controllers even without user screen data
- Using user screen drawing program 'atDesigner'
 - : More variety functions, objects and library image
 - : Intuitive user interface
 - : Multilingual table function: switching language of user screen by touching a button
- Various communication interface: RS232C, RS422, Ethernet, CAN

Specifications

Model	LP-A070-T9D□-C5□	LP-A104-T9D□-C6□
Screen size	7.0 inch	10.4 inch
LCD type	TFT Color LCD	
Resolution	800×480 pixel	800×600 pixel
Display area	154.4×93.44 mm	211.2×158.4 mm
Display color	16,777,216 color	
LCD view angle (top/bottom/left/right)	Within 50°/60°/65°/65° of each	Within 60°/70°/80°/70° of each
Backlight	White LED	
Luminance adjustment	Adjustable by software	
Touch	Resistive type (4-wire)	
Input	16-point	32-point
Insulation method	Photo coupler insulation	
Rated input voltage	24 VDC≒	
Rated input current	X0 to X8: ≈ 10 mA, X9 to XF: ≈ 4 mA	X0 to X8: ≈ 10 mA, X9 to XF: ≈ 4 mA
Voltage range	19.2-28.8 VDC≒	
Input resistance	X0 to X8: 3.3 kΩ, X9 to XF: 5.6 kΩ	X0 to X8: 3.3 kΩ, X9 to XF: 5.6 kΩ
Response time	0.5 ms	
Common method	16-point/1COM	16-point/1COM, 16-point/1COM
Applicable wire	Stranded wire 0.3 to 0.7 mm ²	
Output	16-point	32-point
Power supply	24 VDC≒	
Insulation method	Photo coupler insulation	
Rated load voltage	24 VDC≒	
Load voltage range	19.2-28.8 VDC≒	
Max. load current	0.1 A/1-point, 1.6 A/1COM	
Max. voltage falling when ON	≤ 0.2 VDC≒	
Common method	16-point/1COM	16-point/1COM, 16-point/1COM
Applicable wire	Stranded wire 0.3 to 0.7 mm ²	
Approval	CE ENEC	
Unit weight (package)	≈ 540 g (≈ 742 g)	≈ 1.10 kg (≈ 1.66 kg)
Command	Basic command: 28, application command: 236	
Program capacity	8 K step	
Processing speed	Average: approx. 1μs/basic command, application command	
I/O control method	Batch processing	
Computer control method	Repeated-doubling method, interrupt processing	
Device range	Refer to 'LP-A Series user manual'	
Special function	Positioning function, motion controller, high speed counter	

View product detail



7.0 inch



10.4 inch

Serial interface	RS232C, RS422
USB interface	USB Host, USB Device (USB2.0)
Ethernet interface	IEEE802.3(U), 10/100Base-T
CAN interface	24V CAN transceiver
External storage	Micro SD up to 32 GB (FAT16/32)
Real-time controller	RTC embedded
Battery life cycle	3 years at 25°C

Supportive interface can be different up to model. Please refer to 'Ordering Information' for the supportive interface per model and 'LP-A Series user manual' and 'GP/LP user manual for communication' for the detailed information about each interface.

Language	Korean, English
Text	Bitmap and vector font
Memory for user screen	64 MB
Number of user screen	100 pages
Power supply	24 VDC≡
Allowable voltage range	90 to 110% of power supply
Power consumption	7.0 inch : ≤ 7.2 W, 10.4 inch : ≤ 8.0 W
Insulated resistance	≥ 100 MΩ (500 VDC≡ megger) (between all terminals and case)
Ground	3rd grounding (≤ 100 Ω)
Noise immunity	The square wave noise (pulse width: 1 μs) by the noise simulator ± 0.5 kV
Dielectric strength	500 VAC~ 50/60 Hz for 1 minute (between all terminals and case)
Vibration	0.75 double amplitude at frequency of 10 to 55 Hz in each X, Y, Z direction for 1 hour
Vibration (malfunction)	0.5 double amplitude at frequency of 10 to 55 Hz in each X, Y, Z direction for 10 minutes
Shock	147 m/s ² (approx. 15 G) in each X, Y, Z direction for 3 times
Shock (malfunction)	100 m/s ² (approx. 10 G) in each X, Y, Z direction for 3 times
Ambient temperature	0 to 50 °C, storage: -20 to 60 °C (no freezing or condensation)
Ambient humidity	35 to 85%RH, storage : 35 to 85%RH (no freezing or condensation)
Protection structure	IP65 (front panel, IEC standard)

Software

Visit Autonics web site to download software.

[atDesigner]

atDesigner is for editing project file.

[atLogic]

atLogic is for writing and debugging program.

[Recommended computer specification]

Item	Recommended spec for atDesigner	Recommended spec for atLogic
Operating system	Microsoft Windows 7/8.1/10	Microsoft Windows 7/8.1/10
CPU	Over Intel Core i5-2nd gen. 2500	Over Pentium Dual Core
Memory	Over 8 GB	Over 1 GB
Hard disk	Over 8 GB free space	Over 5 GB free space
Resolution	1920×1080	1280×1024

[Firmware]

Please refer to 'LP-A Series user manual' for firmware upgrade.

Color LCD

Graphic Panels

GP-A Series



Features

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- Various communication interface: RS232C, RS422, Ethernet, CAN

Specifications

Model	GP-A046	GP-A057	GP-A070	GP-A104
Screen size	4.6 inch	5.7 inch	7.0 inch	10.4 inch
LCD type	TFT Color LCD			
Resolution	800×320 pixel	640×480 pixel	800×480 pixel	800×600 pixel
Display area	108×43.2 mm	115.2×86.4 mm	154.4×93.44 mm	211.2×158.4 mm
Display color	16,777,216 color	262,144 color	16,777,216 color	16,777,216 color
LCD view angle (top/bottom/left/right)	Within 75°/70°/80°/80° of each	Within 70°/70°/80°/80° of each	Within 50°/60°/65°/65° of each	Within 60°/70°/80°/70° of each
Backlight	White LED			
Luminance adjustment	Adjustable by software			
Touch	Resistive type (4-wire)			
Approval	CE ENEC			
Unit weight (packaged)	≈ 272 g (≈ 382 g)	≈ 489 g (≈ 644 g)	≈ 520 g (≈ 706 g)	≈ 1.07 kg (≈ 1.62 kg)
Serial interface	RS232C, RS422			
USB interface	USB Host, USB Device(USB2.0)			
Ethernet interface	IEEE802.3(U), 10/100Base-T			
CAN interface	24V CAN transceiver			
External storage	Micro SD up to 32GB (FAT16/32)			
Real-time controller	RTC embedded			
Battery life cycle	3 years at 25°C			

Supportive interface can be different up to model. For the detailed information, please refer to 'Ordering Information'.

Language	Korean, English
Text	Bitmap and vector font
Memory for user screen	64MB
Number of user screen	100 pages
Power supply	24 VDC≡
Allowable voltage range	90 to 110% of power supply
Power consumption	4.6 inch : ≤ 4.8 W, 5.7 / 7.0 inch : ≤ 7.2 W, 10.4 inch : ≤ 8.0 W
Insulated resistance	≥ 100 MΩ (500 VDC≡ megger) (between all terminals and case)
Ground	3rd grounding (≤ 100 Ω)
Noise immunity	The square wave noise (pulse width: 1μs) by the noise simulator ± 0.5 kV
Dielectric strength	500 VAC~ 50/60 Hz for 1 minute (between all terminals and case)
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Shock (malfunction)	100 m/s ² (approx. 10 G) in each X, Y, Z direction for 3 times
Ambient temperature	0 to 50°C, storage: -20 to 60°C (a non freezing or condensation environment)
Ambient humidity	35 to 85%RH, storage : 35 to 85%RH (a non freezing or condensation environment)
Protection structure	IP65 (front panel, IEC standard)

View product detail



4.6 inch



5.7 inch



7 inch



10.4 inch

Software

Visit Autonics web site to download software.

[atDesigner]

atDesigner is for editing project file.

Recommended computer specification for atDesigner is as below.

Item	Recommended spec
Operating system	Windows 7/10
CPU	Intel Core i5-2nd gen. 2500
Memory	8GB
Hard disk	8GB free space
Resolution	1920×1080

[Firmware]

Please refer to 'GP-A Series user manual' for firmware upgrade.