Autonics

Color LCD Logic Panel

LP-A Series

CATALOG

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.
The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

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

CE KC

Ordering Information

This is only for reference, the actual product does not support all combinations. For selecting the specified model, follow the Autonics website.

| LP | - | A | ❶ | - | T | 9 | D | ❷ | - | C | ❸ | ❹ |

❶ Screen size
070: 7.0 inch
104: 10.4 inch

❷ Interface

Series	❷	RS232C	RS422	CAN	Micro SD	USB HOST	USB Device	Ethernet
LP-A070	6	1	1	-	-	1	1	1
	7	2	-	-	-			
LP-A104	8	1	1	1	1			
	9	2	-	1	1			

❸ I/O configuration
5: 7.0 inch - input 16-point, output 16-point
6: 10.4 inch - input 32-point, output 32-point

❹ I/O connector type
R: Ribbon cable connector
T: Terminal block connector

Product Components

- Logic panel + built in battery
- 7.0 inch: 4 fixing brackets
- 10.4 inch: 6 fixing brackets, CAN connector
- Sold separately: communication cable

Specifications

	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 X1F: ≈ 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 X1F: 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 mm²	
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 mm²	
Approval	CE ⮾	
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 coltroller, high speed counter

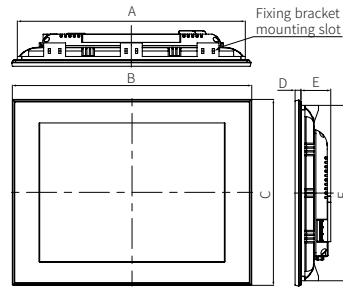| Serial interface	RS232C, RS422
USB interface	USB Host, USB Device (USB2.0)
Ethernet interface	IEEE802.3(U), 10/100Base-T
CAN interface	24V CAN transceiver
External storage	Micro SD up to 32 GB (FAT16/32)
Real-time controller	RTC embedded
Battery life cycle	3 years at 25°C

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

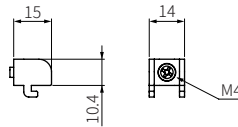| Power supply	24 VDC⎓
Allowable voltage range	90 to 110% of power supply
Power consumption	7.0 inch : ≤ 7.2 W, 10.4 inch : ≤ 8.0 W
Insulated resistance	≥ 100 MΩ (500 VDC⎓ megger) (between all terminals and case)
Ground	3rd grounding (≤ 100 Ω)
Noise immunity	The square wave noise (pulse width: 1 μs) 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/s² (approx. 15 G) in each X, Y, Z direction for 3 times
Shock (malfunction)	100 m/s² (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)

Dimensions

- Unit: mm, For the detailed drawings, follow the Autonics website.

Fixing bracket mounting slot

	A	B	C	D	E	F
7.0 inch	185	194	134	6.5	28.5	125
10.4 inch	260	273	212	7.2	34	200

- Fixing bracket

- Panel cut-out

	A	B	C
7.0 inch	186$^{+1}_{0}$	126$^{+1}_{0}$	≤ 4-R3
10.4 inch	260.5$^{+1}_{0}$	200.5$^{+1}_{0}$	≤ 4-R3

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.