ASK Human Machine Interface Information

Ⅰ、Products Introduction:

AST-***RC Series Summary（Features）

1.High Quality Control and 100% Product Test.

2.IP65F Equivalent Front Panel with Function Keys.

3.Built-in Fanless, Reliable and High Function RISC 32-bits CPU.

4.Provides CCFL backlight／LED backlight／Color TFT LCD.

5.Provides standard 128KB battery backup memory for Alarm,Recie,Data Recording Using (Max.: 1MB).

6.Supports Multi-Languages,Unicode & BMP,JPG,GIF graphic formats.

Item	AST-035RCS/AST-035RCE
CPU	RISC 32 bit CPU
Backlight life	LED backlight,50,000hrs
Resolution	320X240 Pixels
Communication port	COM1/9pin:RS232/RS422/RS485;COM2/Terminal 4pin:RS422/RS485
Touch panel	Hardness/4H,4-wire analog resistance,1 million activation minimal under normal temperature lower than 200 gm force
Display Contrast	Contrasted via V.R.from the back
Power supply	24VDC±10% Isolated;power consumption lower than 10W< /div>
Display Type	Color TFT 256 colors
Flash memory	4M Bytes
System Working SRAM	TST:1M Bytes/TNT:2M Bytes
Battery Backup/RTC	128 K~1M Bytes (optional)
Power Consumption	8 W
Operating Temperature	0°~50°C
Relative Humidity	10% ~ 90%
Shock (Operation)	10 to 55Hz (X, Y, Z direction, 1G 30 mins shock testing)
EMI	Complies with FCC Part 15 Class B
CE	Complies with EN61000-6-4,including 2007 and EN61000-6-2,including 2005
Front Panel	Meets NEMA4 / IP65
Outlet(mm)	130.0X106.2x37(W*H*D)
Cutout(mm)	118.5X92.5(W*H)
Net Weight	0.45 KG

Items	AST-056RCS/RCE	AST-057RCS/RCE
CPU	RISC 32 bit CPU	
Display	TFT , 256 colors	
Operation Mode	Touch	
Brightness	400 cd/m2	350 cd/m2
Backlight	CCFL backlight	LED backlight
Resolution	320x234 (5.6" diagonal)	320x240 (5.7")
Flash Memory	1 MB ~ 16MB (Optional)	
Battery Backup	128 KB ~ 1 MB (Optional)	
System Working Memory	1024 KB	
Communication Port	COM1/COM2, 2 Serial Portse	
Parallel Port	(optional)	
Power Consumption	10 W	
USB Port	--	
Ethernet	(optional)AST-056/057RCE	
Cutout Dimension	174.5 mm [6.87 "] W x 132.5 mm [5.22 "] H	
OutLet Dimension	187.0 mm [7.36 "] W x 143.0 mm [5.63 "] H x 45.0 mm [1.77 "] T	
Weight	0.85Kg/EA	

AST-***FH Series Summary（Features）

1.Portrait 90° display & normal horizontal display supported

2.100% quality test and industrial standard coating cases let ASK be looks reliable and nice.

3.Adopts 32 bits high function; high reliability and fan-less ARM CPU

4.Equipped with genuine 65535 true colors, high brightness TFT modules

5.Provides 3 RS232/422/485 communication ports available in standard models

6.The standard 128KB backup memory, which can expend up to 1MB, allows storing Alarm, Recipe and historical data

7.Supports multi-languages, Windows build-in Fonts, BMP and JPG graphics and GIF animations

8.Provides transparent communication for designers to save their program adjustment time

9.The expansion bus expends various customize devices, such as motion control, temperature control, communication module and I/O module etc.

10.High speed Ethernet port supports upload and download remote communication.

Items	AST-080FHE
Processor	RISC 32 Bits CPU
Display Type	TFT Color LCD with 65535 colors
Operation Mode	Touch
Display size	8" diagonal
Resolution	640X480
Brightness	350 cd/m2 ~ 450 cd/m2
Backlight Tube	CCFL(U type)x1
Contrast	250:1
Signal Interface	TFT LVDS or TTL interface
Communication Port	COM1/COM2/COM3 3 serial ports
USB Port	2 USB Host Ver.2.0 Full Speed Ports
Ethernet Port	10/100 Ethernet Port
Text Range	6x8 dot~96x96 dot font / Windows Build-in Fonts
Input Power	DC20V~DC28V
System Working Memory	64 MB SDRAM Memory (Maximum 128 MB)
Program Application Memory	16 MB Flash Memory (Maximum 64 MB)
Battery Backup Memory	128 KB (Standard) ~ 1 MB (Optional)
Power Consumption	20W
Operating Temperature	0°~50°C (32° ~ 120°F)
Relative Humidity	10% ~ 90% @ 50°C, non-condensing
Shock (Operation)	10 to 55Hz (X, Y, Z direction, 1G 30 Min.)
EMI	Complies with FCC Part 15 Class A
EMC	Complies with EN55022, EN61000-4-2, EN61000-4-3, EN61000-4-8
Front Panel	Meets NEMA4 / IP65F
Net Weight	AST-104FHE:0.9Kg
Cut Out Dimension	221.5 mm [8.72"] W x 164 mm [6.46"] H
OutLet Dimension	232.5 mm [9.15"] W x 175.8 mm [6.75"] H x 49 mm [1.93"] T

Items	AST-104FHE
Processor	RISC 32 Bits CPU
Display Type	TFT Color LCD with 65535 colors
Operation Mode	Touch
Display size	10.4" diagonal
Resolution	640X480
Brightness	350~450 cd/m2
Backlight Tube	CCFLx2
Contrast	300:1~1500:1
Signal Interface	CMOS / TTL
Communication Port	COM1/COM2/COM3 3 serial ports
USB Port	2 USB Host Ver.2.0 Full Speed Ports
Ethernet Port	10/100 Ethernet Port
Text Range	6x8 dot~96x96 dot font / Windows Build-in Fonts
Input Power	DC20V~DC28V
System Working Memory	64 MB SDRAM Memory (Maximum 128 MB)
Program Application Memory	16 MB Flash Memory (Maximum 64 MB)
Battery Backup Memory	128 KB (Standard) ~ 1 MB (Optional)
Power Consumption	20W
Operating Temperature	0°~50°C (32°~ 120°F)
Relative Humidity	10% ~ 90% @ 50°C, non-condensing
Shock (Operation)	10 to 55Hz (X, Y, Z direction, 1G 30 Min.)
EMI（FCC）	Complies with FCC Part 15 Class A
EMC（CE）	Complies with EN61000-6-4,including 2007 and EN61000-6-2,including 2005
Front Panel	Meets NEMA4 / IP65F
Net Weight	AST-104FHE:1.4Kg
Cut Out Dimension	285.5 mm [11.24"] W x 210.5 mm [8.29"] H
OutLet Dimension	297 mm [11.70"] W x 224 mm [8.82"] H x 52 mm [2.05"] T

Items	AST-121FHE
Processor	RISC 32 Bits CPU
Display Type	TFT Color LCD with 65535 colors
Operation Mode	Touch
Display size	12.1" diagonal
Resolution	800X600
Brightness	400~450 cd/m2
Backlight Tube	CCFLx2
Contrast	500:1~1000:1
Signal Interface	LVDS
Communication Port	COM1/COM2/COM3 3 serial ports
USB Port	2 USB Host Ver.2.0 Full Speed Ports
Ethernet Port	10/100 Ethernet Port
Text Range	6x8 dot~96x96 dot font / Windows Build-in Fonts
Input Power	DC20V~DC28V
System Working Memory	64 MB SDRAM Memory (Maximum 128 MB)
Program Application Memory	16 MB Flash Memory (Maximum 64 MB)
Battery Backup Memory	128 KB (Standard) ~ 1 MB (Optional)
Power Consumption	20W
Operating Temperature	0°~50°C (32°~ 120°F)
Relative Humidity	10% ~ 90% @ 50°C, non-condensing
Shock (Operation)	10 to 55Hz (X, Y, Z direction, 1G 30 Min.)
EMI（FCC）	Complies with FCC Part 15 Class A
EMC（CE）	Complies with EN61000-6-4,including 2007 and EN61000-6-2,including 2005
Front Panel	Meets NEMA4 / IP65F
Net Weight	AST-FHE:2.2Kg
Cut Out Dimension	301.5 mm [11.87"] W x 228.0 mm [8.98"] H
OutLet Dimension	315 mm [12.41"] W x 241 mm [9.49"] H x 54.5 mm [2.15"] T

II:Software Introduction (Features):

Project

One project can have many Panel applications

The effort of designing a new Panel application can be greatly reduced as the new Panel can share the global data with existing Panel applications in the same project

It is easy to create a communication link between two Panel applications in the same project

Your precious design data can be protected by designated passwords

Up to 10 languages can be specified for a project and hence your Panel can be used in ten countries using different languages. Thanks for the benefit of Unicode system, any Windows supported language can be specified for your projects

Up to 20 fonts in your computer system can be pre-selected for each language to simplify the selection of font while you are editing text. Changing the font of all the text with the same font can also be done easily by just modifying the corresponding font template

Thousands of graphics and symbols provided by Symbol Factory are readily available for you to use in your screens

Importation and exportation are available for many kinds of design data, which include language settings, font templates, panels, screens, tags, and macros

Panel

Both landscape and portrait screen-orientation modes are

Supported color resolution: 16 grey shades, 256 colors, and

65536 colors Up to 16 data loggers can be created to collect process data

Up to 16 Bit Alarm Blocks can be monitored

Up to 16 Word/Analog Alarm Blocks can be monitored

Up to 16 Recipe Blocks can be created to store recipe data

Operation logging makes it possible to trace the past operations

A global alarm marquee can be created to overlay alarm messages on the display

Macros for many cases: Start-up Macro, Main Macro, Event Macro, Time Macro, Open Macro, Cycle Macro, Close Macro, On Macro, and Off Macro

Objects for setting/controlling: Bit Button, Word Button, Toggle Switch, Screen Button,

Function Button, Analog Slide Switch, Multi-state Switch, Radio Button, Keypad Button, Scroll

Button, Step Button, List, Drop-down List, Numeric Entry, and ASCII Character Entry

Object for viewing/monitoring: Numeric Display, ASCII Character Display,

Bit Lamp, Multi-state Lamp, Message Display, Time Display, Date Display,

Day-of-week Display, Meter, Dynamic Circle, Dynamic Rectangle, GIF

Display, Picture Display, Bar Graph, Line Chart, Pie Graph, Scatter Chart,

Alarm History Display, Alarm Count Display, Current Alarm Display, Alarm

Marquee, Historic Data Display, Historic Message Display, and Historic

Trend Display

Objects for setting/controlling can be enabled or disabled dynamically

Objects can be made visible or invisible dynamically

The capability of communicating with multiple controllers directly or indirectly is available

Panels equipped with keypad or connected with an external keypad are supported

Tool

Data transfer between PC and Panel can be done through COM port or Ethernet

Both online and offline simulation are available for the Panel applications

The Transparent Communication is provided to save the effort of

connecting PC to PLC when the Panel under development is already

connected to the PC and the PLC. Your PLC programming software is able to

access the PLC through the Panel as if the Panel is transparent

Data Transfer Helper (DTH) allows you to get data from the Panel and update the data stored

in the Panel

III:Selection Description:

Example	AS	T		104	F	H	E
explanation	Installation: AS:horizontal VS:vertical	Operation Mode: T:Touch K:Key	—	Display size: 035:3.5″ 037:3.7″ 056:5.6″ 057:5.7″ 070:7″ 080:8″ 104:10.4″ 121:12.1″	Function: G:General R:Multifunction F:Advanced	Color: C:256 Colors H:65535 Colors	port: S:232/485 E:Ethernet