
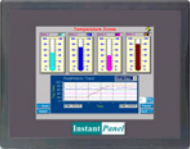



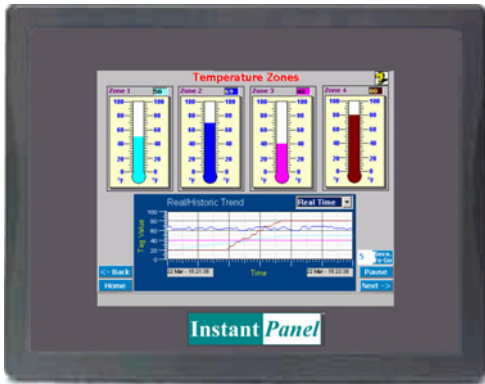


# InstantPanel V-Series Specifications

| Model   | IP-6V-CE  | IP-8V-CE  | IP-10V-CE  | IP-12V-CE   |
|---|---|---|--|---|
|  |  |  |  |  |
| Display   | 5.6" TFT  | 8" TFT  | 10.4" TFT  | 12.1" TFT   |
| Brightness  | 500cd/m <sup>2</sup>  | 400cd/m <sup>2</sup>  | 400cd/m <sup>2</sup>   | 250cd/m <sup>2</sup>  |
| Color   | 65536 color   | 65536 color   | 65536 color  | 65536 color   |
| Contrast Ratio  | 150:1   | 250:1   | 300:1  | 200:1   |
| Resolution (WxH dots)   | 320 x 234   | 640 x 480   | 640 x 480  | 800 x 600   |
| CCFL Life Time  | 30,000 hr.  | 50,000 hr.  | 50,000 hr.   | 50,000 hr.  |
| Touch Panel   | 4 wires resistive type  |   |  |   |
| Touch Accuracy  | 1.5mm   | 2mm   | 2mm  | 2mm   |
| I/O Port  | Com1(RS232/RS485 2w/4w), Com2(RS232), Com3(RS232/RS485 2w)                        |   |  |   |
| Ethernet Port   | 10/100 Base-T   |   |  |   |
| USB Host  | USB 2.0 x 2   | USB 2.0 x 3   | USB 2.0 x 3  | USB 2.0 x 3   |
| Audio   | Line Out x 1  | Line Out x 1, Mic x 1   | Line Out x 1, Mic x 1  | Line Out x 1, Mic x 1   |
| Processor   | 32 Bit RISC CPU 200MHz  |   |  |   |
| Flash Memory  | 32MB  |   |  |   |
| DRAM  | 64MB  |   |  |   |
| Compact Flash card slot   | Type I / Type II  |   |  |   |
| IDE Interface   | N / A   | 44 Pins IDE Interface   | 44 Pins IDE Interface  | 44 Pins IDE Interface   |
| RTC   | Built-in Real Time Clock  |   |  |   |
| <b>General Specifications</b>   |   |   |  |   |
| Input Voltage   | 24VDC ± 5%  |   |  |   |
| Power Consumption   | 370mA   | 440mA   | 440mA  | 500mA   |
| CE  | Complies with EN50081-2 and EN50082-2 Standard                                    |   |  |   |
| FCC   | Complies with FCC Class A   |   |  |   |
| Vibration endurance   | 10 to 25 Hz (X,Y,Z direction 2G 30minutes)  |   |  |   |
| Protection Structure  | IP65 Front Panel (O ring seal)  |   |  |   |
| Operating Temperature   | 0 °C ~ 45°C (32 °F ~ 113°F)   |   |  |   |
| Storage Temperature   | -20 °C ~ 60°C (-4 °F ~ 140°F)   |   |  |   |
| Enclosure   | Plastic   |   |  |   |
| VESA screw holes  | N / A   | VESA 75x75mm  | VESA 75x75mm   | VESA 75x75mm  |
| Dimensions WxHxD  | 204x150x48mm  | 240x179x50mm  | 286.2x212.8x50mm   | 322x243x51mm  |
| Panel Cutout Dimensions   | 192x138mm<br>(7.56"x5.43")  | 222x167mm<br>(8.7"x6.5")  | 259x201mm<br>(10.20"x7.91")  | 305x231mm<br>(12"x9.09")  |
| Weight  | Approx<br>.85 Kg (1.87lbs)  | Approx<br>1.3 Kg (2.87lbs)  | Approx<br>1.7 Kg (3.75lbs)   | Approx<br>2.1 Kg (4.63lbs)  |
| Operating System  | Windows CE.NET 4.2/5.0  |   |  |   |

## IP-6V-CE - Windows CE touch panel with 5.6" TFT display



### Features

- 5.6" 320x234 TFT LCD
- CIRRUS LOGIC® EP9315 200MHz ARM920T core processor
- Fan-less cooling system
- Built-in flash memory and Windows CE OS inside
- NEMA4/IP65 compliant front panel
- One CompactFlash™ slot

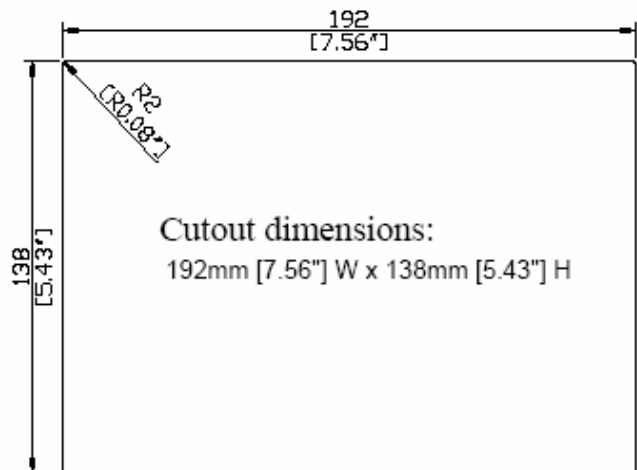
(Note: Sample HMI screen shown)

### Introduction

The IP-6V-CE is a miniature and compact platform that has no redundant functions. Its RISC kernel, the CIRRUS LOGIC EP9315 200MHz processor design with a memory management unit (MMU), that supports Windows CE. The ARM920T's 32-bit microcontroller architecture, with a five-stage pipeline, delivers impressive performance at very low power.

The EP9315 includes a hardware graphics acceleration engine that improves graphic performance by handling block copy, block fill and hardware line draw operations. The graphics accelerator is used in the system to off load graphics operations from the processor.

| Specifications              |  |
|-----------------------------|--|
| <b>Construction:</b>        | plastic molding housing  |
| <b>Display:</b>             | 5.6" color TFT LCD   |
| <b>CPU and core logic:</b>  | CIRRUS LOGIC® EP9315 200MHz ARM920T core processor   |
| <b>DRAM:</b>                | 64 MB on board   |
| <b>Storage:</b>             | 32 MB flash memory on board,<br>1 CompactFlash™ card slot  |
| <b>I/O:</b>                 | 3 serial ports:<br>Com1: RS-232/RS-485 2w/4w,<br>Com2: RS-232,<br>Com3: RS-232/RS-485 2w<br>1 Ethernet port (10/100Base-T)<br>2 USB 2.0 full-speed host (12Mbps) |
| <b>Sound output:</b>        | 20-bits Stereo output  |
| <b>RTC:</b>                 | Built-in   |
| <b>Power input:</b>         | 24 Voc <sub>DC</sub> , 370mA maximum   |
| <b>Dimension (W H x D):</b> | 204 x 150 x 48mm   |
| <b>Weight:</b>              | 0.85kg   |



### Environmental Specifications

- Operating temperature:** 0° ~ 45°C (32° ~ 113°F)
- Relative humidity:** 10% ~ 90% @ 40°C, non-condensing
- Shock (operation):** 10 to 25Hz(X,Y,Z direction 2G 30minutes)
- EMI:** Complies with FCC Class A
- CE:** Complies with EN50081-2 and EN50082-2 standards
- Front panel meets NEMA4 / IP65**

### Touchscreen

- Type:** 4-wire, analog resistive
- Resolution:** continuous
- Light transmission:** above 80%

### LCD Display

|                                     |   |
|-------------------------------------|---|
| <b>Display type</b>                 | TFT LCD                                     |
| <b>Display size (diagonal)</b>      | 5.6"  |
| <b>Max colors</b>                   | 65536                                       |
| <b>Resolution</b>                   | 320 x 234                                   |
| <b>Pixel pitch (HxV, mm)</b>        | 0.362 x 0.118                               |
| <b>Viewing angle (°)</b>            | 20(Top), 40(Bottom),<br>50(left), 50(Right) |
| <b>Luminance (cd/m<sup>2</sup>)</b> | 150   |
| <b>Storage temperature (°C)</b>     | -20~60                                      |
| <b>Operating temperature (°C)</b>   | 0~45  |
| <b>Backlight</b>                    | CCFL x 1                                    |
| <b>Contrast ratio</b>               | 250:1                                       |

### Ordering Info

45-IP56V-CE

**Note:** Manufacturer's warranty applies on all hardware. Specifications subject to change without notice  
Copyright © 2005-2009 Software Horizons Inc., 100 Treble Cove Road, N. Billerica, MA 01862, USA [www.InstantHMI.com](http://www.InstantHMI.com)

# IP-8V-CE Windows CE touch panel computer with 8" VGA TFT display



## Features

- 8" 640x480 65536 colors TFT LCD
- CIRRUS LOGIC® EP9315 200MHz ARM920T core processor
- Fan-less cooling system
- Built-in flash memory and Windows CE OS inside
- NEMA4/IP65 compliant front panel
- One CompactFlash™ slot
- 44-pin IDE Interface

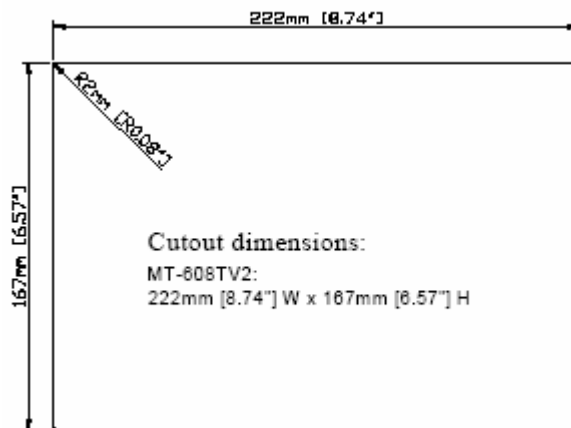
(Note: Sample HMI screen shown)

## Introduction

The IP-8V-CE is a miniature and compact platform that has no redundant functions. Its RISC kernel, the CIRRUS LOGIC EP9315 200MHz processor design with a memory management unit (MMU), that supports Windows CE. The ARM920T's 32-bit microcontroller architecture, with a five-stage pipeline, delivers impressive performance at very low power.

The EP9315 includes a hardware graphics acceleration engine that improves graphic performance by handling block copy, block fill and hardware line draw operations. The graphics accelerator is used in the system to off load graphics operations from the processor.

| Specifications             |  |
|----------------------------|--|
| <b>Construction:</b>       | plastic molding housing  |
| <b>Display:</b>            | 8" 640x480 65536 color TFT LCD   |
| <b>CPU and core logic:</b> | CIRRUS LOGIC® EP9315 200MHz ARM920T core processor   |
| <b>DRAM:</b>               | 64 MB on board   |
| <b>Storage:</b>            | 32 MB flash memory on board,<br>1 CompactFlash™ card slot,<br>44-pin IDE interface.  |
| <b>I/O:</b>                | 3 serial ports:<br>Com1: RS-232/RS-485 2w/4w,<br>Com2: RS-232,<br>Com3: RS-232/RS-485 2w<br>1 Ethernet port (10/100Base-T)<br>3 USB 2.0 full-speed host (12Mbps) |
| <b>Sound output:</b>       | 20-bits Stereo output  |
| <b>RTC:</b>                | Built-in   |
| <b>Power input:</b>        | 24 V <sub>DC</sub> , 1A maximum  |



## Environmental Specifications

**Operating temperature:** 0° ~ 45°C (32° ~ 113°F)  
**Relative humidity:** 10% ~ 90% @ 40°C, non-condensing  
**Shock (operation):** 10 to 25Hz(X,Y,Z direction 2G 30minutes)  
**EMI:** Complies with FCC Class A  
**CE:** Complies with EN50081-2 and EN50082-2 standards  
**Front panel meets NEMA4 / IP65**

## Touchscreen

**Type:** 4-wire, analog resistive  
**Resolution:** continuous  
**Light transmission:** above 80%  
**Life:** 1 million activation minimum

| LCD Display                         |                          |
|-------------------------------------|--------------------------|
| <b>Display type</b>                 | TFT LCD                  |
| <b>Display size (diagonal)</b>      | 8"                       |
| <b>Max colors</b>                   | 65536                    |
| <b>Resolution</b>                   | 640 x 480                |
| <b>Pixel pitch (HxV, mm)</b>        | 0.2535 x 0.2535          |
| <b>Viewing angle (°)</b>            | 55/65/65/65<br>(T/B/R/L) |
| <b>Luminance (cd/m<sup>2</sup>)</b> | 400                      |
| <b>Storage temperature (°C)</b>     | -25~70                   |
| <b>Operating temperature (°C)</b>   | 0~45                     |
| <b>Backlight</b>                    | CCFL x 1                 |
| <b>Backlight life time</b>          | 50,000 hrs.              |
| <b>Contrast ratio</b>               | 250:1                    |

## Ordering Info

45-IP80V-CE

**Note:** Manufacturer's warranty applies on all hardware. Specifications subject to change without notice  
 Copyright © 2005-2009 Software Horizons Inc., 100 Treble Cove Road, N. Billerica, MA 01862, USA [www.InstantHMI.com](http://www.InstantHMI.com)

# IP-10V-CE Windows CE touch panel computer with 10.4" TFT display



## Features

- 10.4" 640x480 65536 colors TFT LCD
- CIRRUS LOGIC® EP9315 200MHz ARM920T core processor
- Fan-less cooling system
- Built-in flash memory and Windows CE OS inside
- NEMA4/IP65 compliant front panel
- One CompactFlash™ slot
- 44-pin IDE Interface

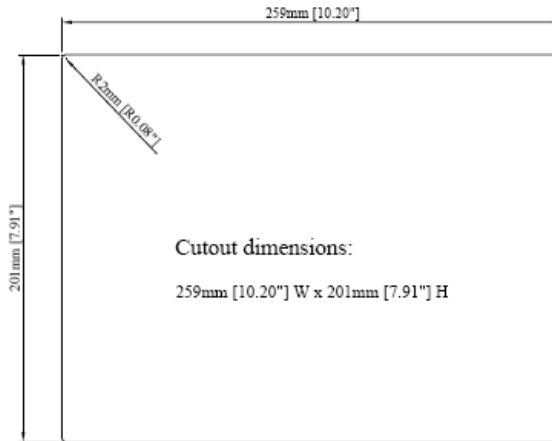
(Note: Sample HMI screen shown)

## Introduction

The IP-10V-CE is a miniature and compact platform that has no redundant functions. Its RISC kernel, the CIRRUS LOGIC EP9315 200MHz processor design with a memory management unit (MMU), that supports Windows CE. The ARM920T's 32-bit microcontroller architecture, with a five-stage pipeline, delivers impressive performance at very low power.

The EP9315 includes a hardware graphics acceleration engine that improves graphic performance by handling block copy, block fill and hardware line draw operations. The graphics accelerator is used in the system to off load graphics operations from the processor.

| Specifications             |  |
|----------------------------|--|
| <b>Construction:</b>       | plastic molding housing  |
| <b>Display:</b>            | 10.4" 640x480 65536 color TFT LCD  |
| <b>CPU and core logic:</b> | CIRRUS LOGIC® EP9315 200MHz ARM920T core processor   |
| <b>DRAM:</b>               | 64 MB on board   |
| <b>Storage:</b>            | 32 MB flash memory on board,<br>1 CompactFlash™ card slot,<br>44-pin IDE interface.  |
| <b>I/O:</b>                | 3 serial ports:<br>Com1: RS-232/RS-485 2w/4w,<br>Com2: RS-232,<br>Com3: RS-232/RS-485 2w<br>1 Ethernet port (10/100Base-T)<br>3 USB 2.0 full-speed host (12Mbps) |
| <b>Sound output:</b>       | 20-bits Stereo output  |
| <b>RTC:</b>                | Built-in   |
| <b>Power input:</b>        | 24 V <sub>DC</sub> , 440mA maximum   |



## Environmental Specifications

- Operating temperature:** 0° ~ 45°C (32° ~ 113°F)
- Relative humidity:** 10% ~ 90% @ 40°C, non-condensing
- Shock (operation):** 10 to 25Hz(X,Y,Z direction 2G 30minutes)
- EMI:** Complies with FCC Class A
- CE :** Complies with EN50081-2 and EN50082-2 standards
- Front panel meets NEMA4 / IP65**

## Touchscreen

- Type:** 4-wire, analog resistive
- Resolution:** continuous
- Light transmission:** above 80%
- Life:** 1 million activation minimum

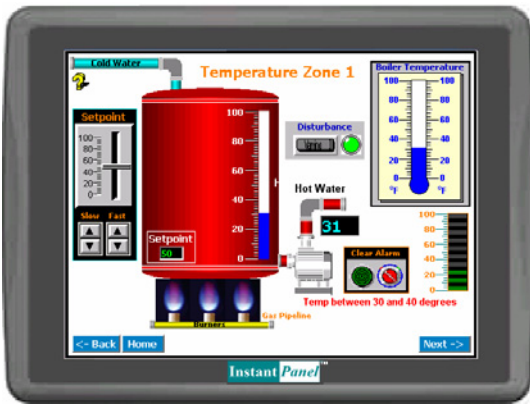
| LCD Display                         |                          |
|-------------------------------------|--------------------------|
| <b>Display type</b>                 | TFT LCD                  |
| <b>Display size (diagonal)</b>      | 10.4"                    |
| <b>Max colors</b>                   | 65536                    |
| <b>Resolution</b>                   | 640 x 480                |
| <b>Pixel pitch (HxV, mm)</b>        | 0.33 x 0.33              |
| <b>Viewing angle (°)</b>            | 35/45/55/55<br>(T/B/R/L) |
| <b>Luminance (cd/m<sup>2</sup>)</b> | 400                      |
| <b>Storage temperature (°C)</b>     | -20~60                   |
| <b>Operating temperature (°C)</b>   | 0~45                     |
| <b>Backlight</b>                    | CCFL x 2                 |
| <b>Backlight life time</b>          | 50,000 hrs.              |
| <b>Contrast ratio</b>               | 300:1                    |

## Ordering Info

45-IP10V-CE

**Note:** Manufacturer's warranty applies on all hardware. Specifications subject to change without notice  
Copyright © 2005-2009 Software Horizons Inc., 100 Treble Cove Road, N. Billerica, MA 01862, USA [www.InstantHMI.com](http://www.InstantHMI.com)

# IP-12V-CE Windows CE touch panel computer with 12.1" SVGA TFT display



## Features

- 12.1" SVGA TFT LCD
- CIRRUS LOGIC® EP9315 200MHz ARM920T core processor
- Fan-less cooling system
- Built-in flash memory and Windows CE OS inside
- NEMA4/IP65 compliant front panel
- One CompactFlash™ slot
- 44-pin IDE Interface

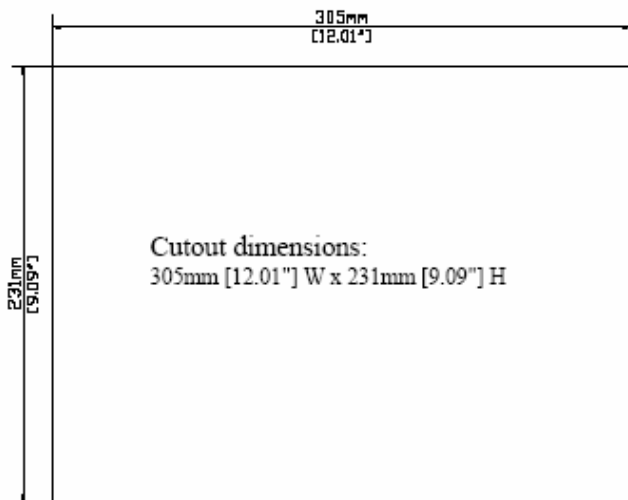
(Note: Sample HMI screen shown)

## Introduction

The IP-12V-CE is a compact platform that has no redundant functions. Its RISC kernel, the CIRRUS LOGIC EP9315 200MHz processor design with a memory management unit (MMU), supports Windows CE. The ARM920T's 32-bit microcontroller architecture, with a five-stage pipeline, delivers impressive performance at very low power.

The EP9315 includes a hardware graphics acceleration engine that improves graphic performance by handling block copy, block fill and hardware line draw operations. The graphics accelerator is used in the system to off load graphics operations from the processor.

| Specifications              |  |
|-----------------------------|--|
| <b>Construction:</b>        | plastic molding housing  |
| <b>Display:</b>             | 12.1" SVGA Color TFT LCD   |
| <b>CPU and core logic:</b>  | CIRRUS LOGIC® EP9315 200MHz ARM920T core processor   |
| <b>DRAM:</b>                | 64 MB on board   |
| <b>Storage:</b>             | 32 MB flash memory on board,<br>1 CompactFlash™ card slot,<br>44-pin IDE interface.  |
| <b>I/O:</b>                 | 3 serial ports:<br>Com1: RS-232/RS-485 2w/4w,<br>Com2: RS-232,<br>Com3: RS-232/RS-485 2w<br>1 Ethernet port (10/100Base-T)<br>3 USB 2.0 full-speed host (12Mbps) |
| <b>Sound output:</b>        | 20-bits Stereo output  |
| <b>RTC:</b>                 | Built-in   |
| <b>Power input:</b>         | 24 V <sub>DC</sub> , 1A maximum  |
| <b>Dimension (W H x D):</b> | 322 x 243 x 51mm   |
| <b>Weight:</b>              | about 2.1kg  |



## Environmental Specifications

- Operating temperature:** 0° ~ 45°C (32° ~ 113°F)
- Relative humidity:** 10% ~ 90% @ 40°C, non-condensing
- Shock (operation):** 10 to 25Hz(X,Y,Z direction 2G 30minutes)
- EMI:** Complies with FCC Class A
- CE:** Complies with EN50081-2 and EN50082-2 standards
- Front panel meets NEMA4 / IP65**

## Touchscreen

- Type:** 4-wire, analog resistive
- Resolution:** continuous
- Light transmission:** above 80%
- Life:** 1 million activation minimum

| LCD Display                         |                                       |
|-------------------------------------|---------------------------------------|
| <b>Display type</b>                 | TFT color LCD                         |
| <b>Display size (diagonal)</b>      | 12.1"                                 |
| <b>Max colors</b>                   | 65536                                 |
| <b>Resolution</b>                   | 800 x 600                             |
| <b>Pixel pitch (HxV, mm)</b>        | 0.3075 x 0.3075                       |
| <b>Viewing angle (°)</b>            | 95 (Upper+Lower),<br>120 (Left+Right) |
| <b>Luminance (cd/m<sup>2</sup>)</b> | 250                                   |
| <b>Storage temperature (°C)</b>     | -20~60                                |
| <b>Operating temperature (°C)</b>   | 0~45                                  |
| <b>Backlight</b>                    | 2 CCFLs                               |
| <b>Contrast ratio</b>               | 200:1                                 |

## Ordering Info

45-IP12V-CE

**Note:** Manufacturer's warranty applies on all hardware. Specifications subject to change without notice  
Copyright © 2005-2009 Software Horizons Inc., 100 Treble Cove Road, N. Billerica, MA 01862, USA [www.InstantHMI.com](http://www.InstantHMI.com)

