



## Function and System Design

**Function** ControlCare Panel PC SPC150 and SPC350 are robust, high performance touchscreen computers designed for cabinet, console or other industrial panel mounting. They are delivered as part of an overall solution package preconfigured with Control Care P View and the corresponding application. Two versions are available:

- ControlCare Panel PC SPC150, comprising 12" screen and preconfigured P View Web-client
- ControlCare Panel PC SPC350, comprising 15" or 19" screen and preconfigured P View

P View supports stand-alone applications, client-server architecture and Web server for the configuration of your special needs. It is a program suite that provides a complete solution for HMI/SCADA software applications.

### System architecture

Figure 1 shows a monitoring system with the 19" ControlCare Panel PC acting as P View server. Process values are collected from the PLC or DCS via the Ethernet or serial backbone and made available to the P View clients running in the other stations. Alternative connections for the Panel PC are e.g. via Ethernet and a Fieldgate FXA720 to a PROFIBUS application or via the serial interface to a PROFIBUS or MODBUS application.

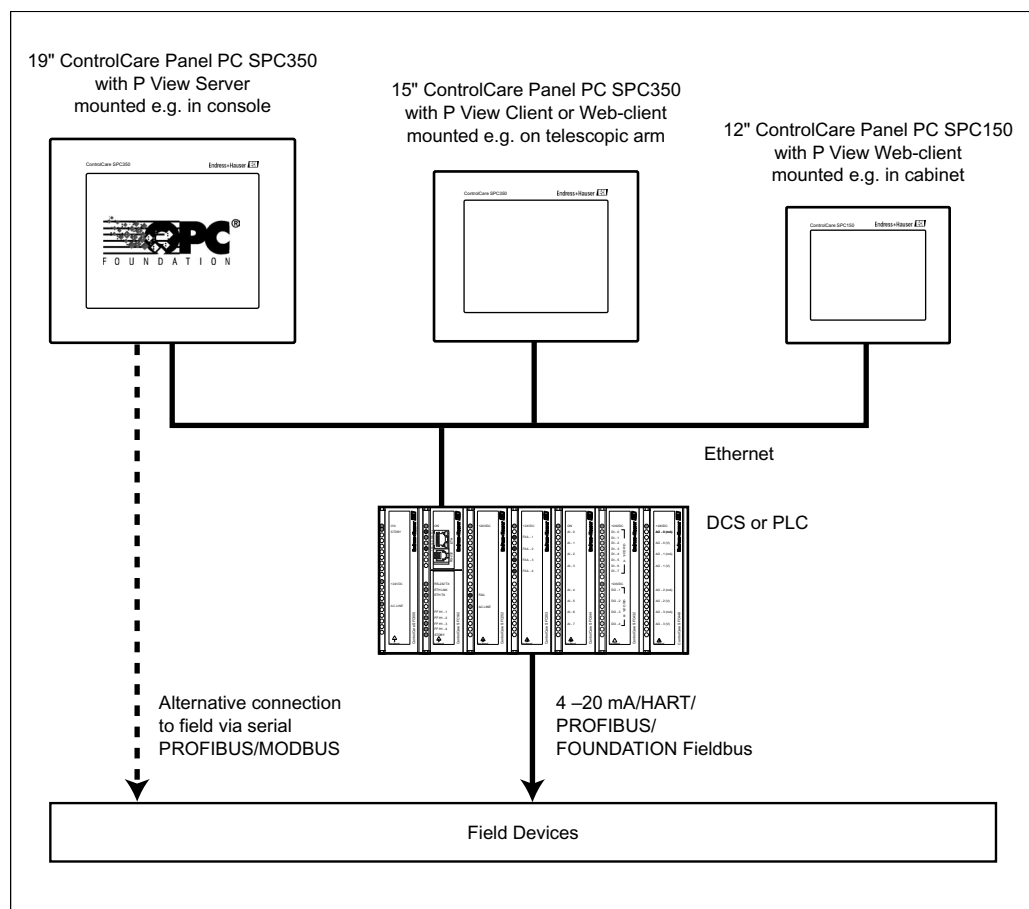


Fig. 1: Example for system architecture with server and client Panel PCs

**Additional operating stations** P View allows additional operating stations (clients) to be connected to the central monitoring station (server). There are two types of client available, fat and lean, whereby both types can be in the monitoring system.

- P View Client stations give direct access to the server station. They work with the P View software but without local OPC data.
- P View Web Client connections can be made via Internet Explorer from anywhere in the world to the application running on the server station. The connection can be protected with firewalls and other security mechanisms. No special software is required on the client side: Internet Explorer offers the functionality required by the P View server.

## Panel PC Specification

### General

Attribute	12" ControlCare Panel PC SPC150	15" ControlCare Panel PC SPC350	19" ControlCare Panel PC SPC350
CPU	Celeron 400 MHz	Pentium III 1266 MHz	Pentium III 1266 MHz
Memory	256 MB SDRAM (standard) 512 MB SDRAM (option)	512 MB SDRAM (standard) 1024 MB SDRAM (option)	512 MB SDRAM (standard) 1024 MB SDRAM (option)
Compact flash card	512 MB (standard) 1024 MB (option)	–	–
Hard disk drive	–	40 GB (standard) 100 GB (optional)	40 GB (standard) 100 GB (optional)
Floppy-disk drive (3½" )	–	Optional, via USB port	Optional, via USB port
DVD-RW drive	–	Optional, via USB port	Optional, via USB port

### Display

Attribute	12" ControlCare Panel PC SPC150	15" ControlCare Panel PC SPC350	19" ControlCare Panel PC SPC350
Screen size	12.1" diagonal	15.0" diagonal	19" diagonal
Type	Active matrix LCD TFT color	Active matrix LCD TFT color	Active matrix LCD TFT color
Resolution	800 x 600 pixel (SVGA)	1024 x 768 pixel, XGA	1280 x 1024 pixel
Operation	Touchscreen	Touchscreen	Touchscreen

### External interfaces

Attribute	12" ControlCare Panel PC SPC150	15" ControlCare Panel PC SPC350	19" ControlCare Panel PC SPC350
Communication	1x serial RS-232C (COM1)	1x serial RS-232C (COM1)	1x serial RS-232C (COM1)
	1x Ethernet 10/100 Base T	2x Ethernet 10/100 Base T	2x Ethernet 10/100 Base T
		PROFIBUS card (optional)	PROFIBUS card (optional)
Accessories	1x VGA (for external screen)	1x VGA (for external screen)	1x VGA (for external screen)
	1x PS/2 (for keyboard)	1x PS/2 (for mouse)	1x PS/2 (for mouse)
	1x CF socket for flash card	1x PS/2 (for keyboard)	1x PS/2 (for keyboard)
	2x USB 1.1	1x parallel LPT (for printer)	1x parallel LPT (for printer)
		2x USB 1.1	2x USB 1.1

### Software

Attribute	12" ControlCare Panel PC SPC150	15" ControlCare Panel PC SPC350	19" ControlCare Panel PC SPC350
Operating system	Windows XP Embedded	Windows XP Professional MUI	Windows XP Professional MUI
ControlCare P View	Web-Client	Server, client or Web-client, according to application	Server, client or Web-client, according to application

### Power supply

Attribute	12" ControlCare Panel PC SPC150	15" ControlCare Panel PC SPC350	19" ControlCare Panel PC SPC350
Power supply	18...36 VDC (SELV)	18...36 VDC (SELV)	90...260 VAC (autorange)
Protection to IEC 60950	–	–	Class I
Power consumption	Max. 70 W	Max. 100 W	Max. 160 VA

## Operating Conditions

### Mechanical

Attribute	12" ControlCare Panel PC SPC150	15" ControlCare Panel PC SPC350	19" ControlCare Panel PC SPC350
Degree of protection	Front: IP 65 Rear: IP 20	Front IP 65 Rear: IP 20	Front: IP 65 Rear: IP 20
Vibrational resistance 10 Hz to 58 Hz: 58 Hz to 150 Hz:	to IEC 60068-2-6 ±0.075 mm DA 10 m/s <sup>2</sup>	to IEC 60068-2-6 ±0.075 mm DA 10 m/s <sup>2</sup>	to IEC 60068-2-6 ±0.075 mm DA 10 m/s <sup>2</sup>
Shock resistance	to IEC 60068-2-7 10g, 11 ms, 3 shocks	to IEC 60068-2-7 10g, 11 ms, 3 shocks	to IEC 60068-2-7 10g, 11 ms, 3 shocks

### Environmental

Attribute	12" ControlCare Panel PC SPC150	15" ControlCare Panel PC SPC350	19" ControlCare Panel PC SPC350
Ambient temperature Operation: Storage:	with natural convection +5°C to +45°C (vertical) -20°C to +60°C		
Relative humidity	max. 50% at +40°C, non-condensing max. 90% at +20°C, non-condensing		
Surrounding air	free from corrosive gases		
EMC Interference emission:	to Directive89/336/EWG EN 55011/EN 55022, limit Class A	to Directive89/336/EWG EN 55011/EN 55022, limit Class A	to Directive89/336/EWG EN 55011/EN 55022, limit Class A
Interference immunity:	IEC 61000-6-2: 1999	IEC 50082-2: 1996	IEC 61000-6-2: 1999

## Mechanical Construction

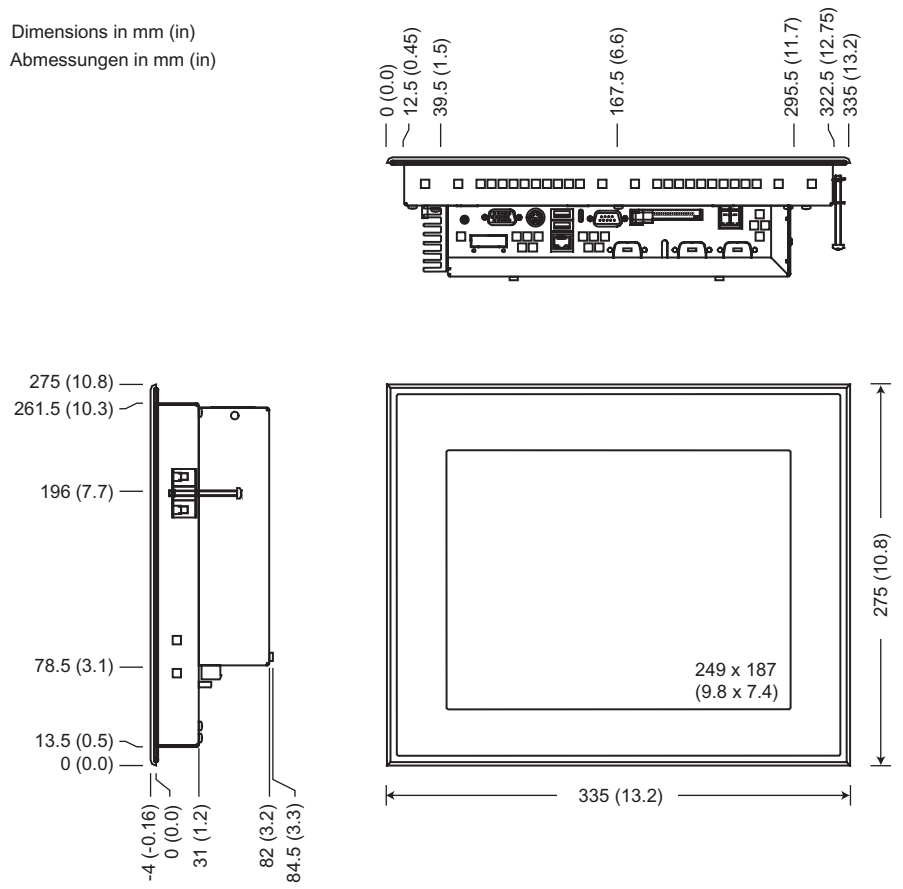
### General

Attribute	12" ControlCare Panel PC SPC150	15" ControlCare Panel PC SPC350	19" ControlCare Panel PC SPC350
Mounting	Designed for mounting in panel, cabinet or industrial monitor enclosure		
Front panel	Aluminium baseplate with laminated plastic foil	Steel baseplate with laminated plastic foil	Aluminium baseplate with laminated plastic foil
Housing	1 mm galvanized steel plate	1 mm galvanized steel plate	1 mm galvanized steel plate
Cooling	No cooler	CPU and device cooler	CPU and device cooler
Weight	4.0 kg	7.3 kg	12.7 kg
Overall dimensions	288mm x 220mm x 85.4mm (11.8" x 8.3" x 3.3") for details see Page 5	483mm x 355mm x 90mm (19" x 14" x 3.5") for details see Page 6	483mm x 400mm x 206mm (19" x 15.5" x 8.1") for details see Page 7

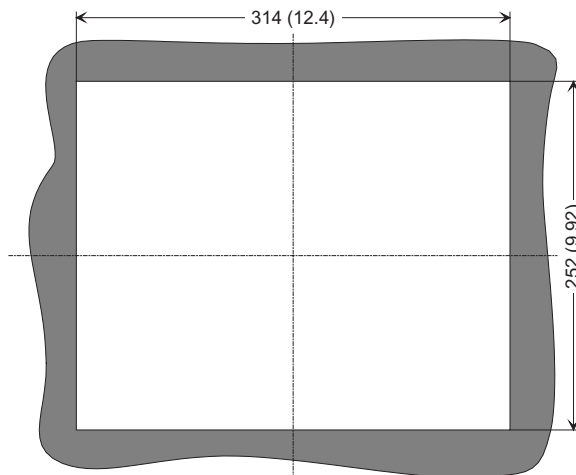
## ControlCare Panel PC SPC150, 12" screen

### Principle dimensions

Dimensions in mm (in)  
Abmessungen in mm (in)



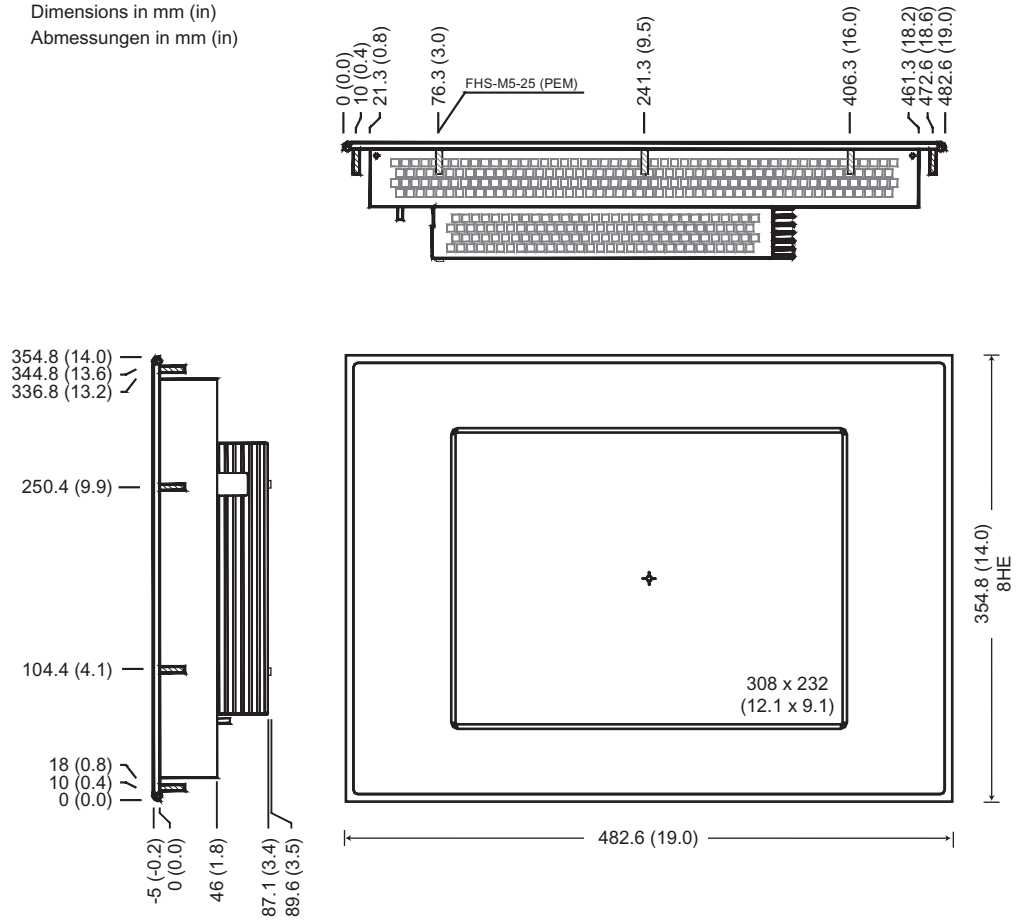
### Cut-out



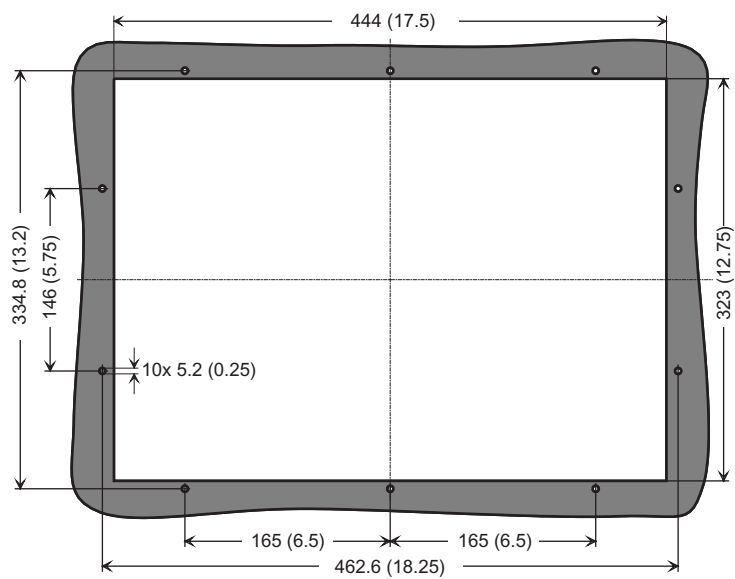
## ControlCare Panel PC SPC350, 15" screen

### Principle dimensions

Dimensions in mm (in)  
Abmessungen in mm (in)



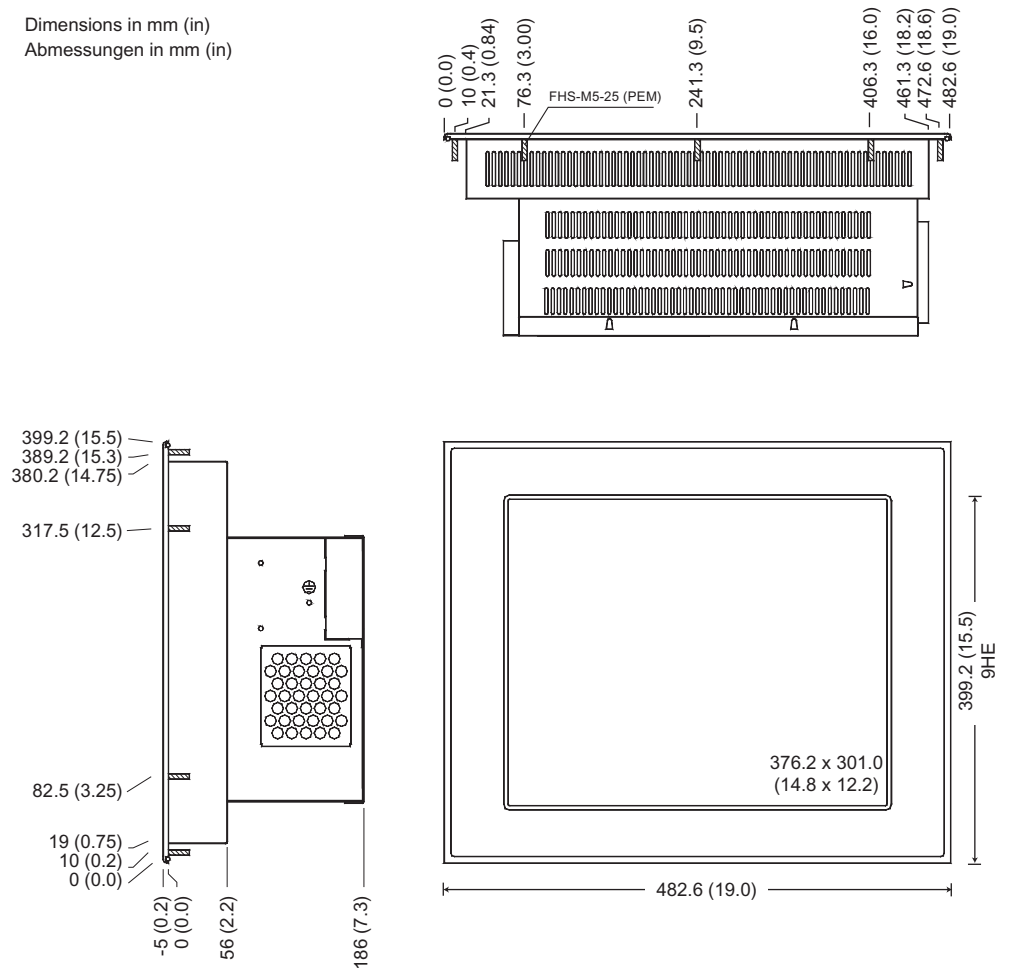
### Cut-out



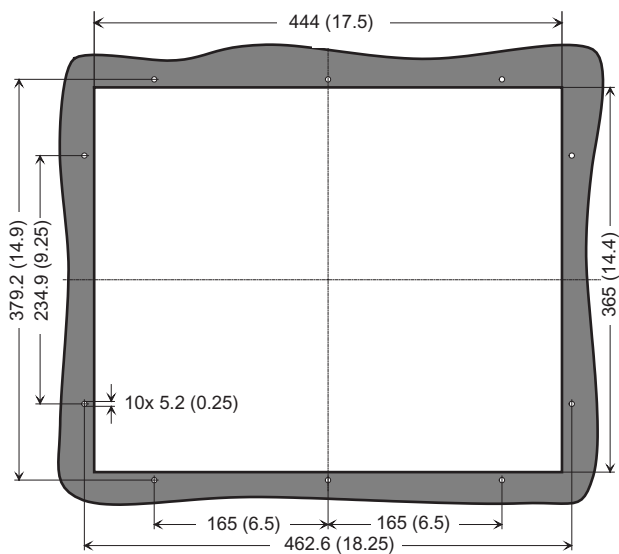
## ControlCare Panel PC SPC350, 19" screen

### Principle dimensions

Dimensions in mm (in)  
Abmessungen in mm (in)



### Cut-out



## Ordering Information

### ControlCare Panel PC SPC150

#### Product structure

SPC150 ControlCare Panel PC as P View Web-client	
<b>Monitor Size</b>	
12	12"
<b>Memory Extension</b>	
A	256 MB
B	512 MB
<b>Compact Flash</b>	
1	512 MB
2	1024 MB
<b>Keyboard</b>	
A	No keyboard
C	Compact keyboard with trackball
M	Keyboard with optical mouse
<b>Hardware extensions</b>	
A	Without
<b>Options</b>	
1	None
SPC150	

### ControlCare Panel PC SPC350

#### Product structure

SPC350 ControlCare Panel PC as P View Server or Client, as appropriate	
<b>Monitor Size</b>	
15	15"
19	19"
<b>Memory Extension</b>	
A	512 MB
B	1024 MB
<b>Hard Disk</b>	
1	40 MB
2	80 MB
3	100 MB
<b>Keyboard</b>	
A	No keyboard
C	Compact keyboard with trackball
M	Keyboard and optical mouse
<b>Hardware Extension</b>	
A	Without
B	CD drive via USB
C	Floppy drive via USB
D	CD-RW via USB
E	Combo-Drive via USB
<b>PROFIBUS</b>	
A	No PROFIBUS
M	PROFIBUS Master
<b>Slot Extension</b>	
1	Not used
<b>Additional option</b>	
1	Not used
SPC350	



## Certificates and Approvals

### Approval

Attribute	12" ControlCare Panel PC SPC150	15" ControlCare Panel PC SPC350	18" ControlCare Panel PC SPC350
CE Certificate	EMC conformity	EMC conformity	EMC conformity
UL Certificate	in preparation	yes	yes

## Documentation

### Competence Brochure

- ControlCare - P View  
Competence Brochure  
CP 007S/04/en/09.04

- ControlCare  
Competence Brochure  
CP 008S/04/en/09.04

### Operating Instructions

- ControlCare Panel PC SPC150  
Operating Instructions  
BA 045S/04/en/01.06
- ControlCare Panel PC SPC350  
Operating Instructions  
BA 046S/04/en/01.06

- ControlCare - P View  
Getting Started  
BA 042S/04/en/12.04

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