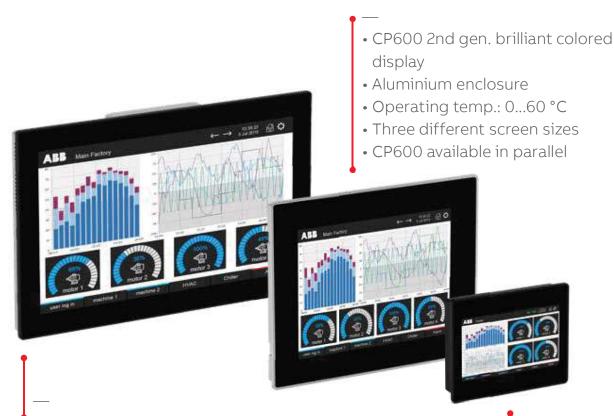—

CP600-eCo, CP600 and CP600-Pro
Key features

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Various options for tailor made HMI solutions:
• PB610 Panel Builder 600 HMI applications
• Visualization of AC500 web servers
• Mobile remote access to HMI applications
• PB610-R PC runtime for Windows platforms
• Drivers for integration into automation systems
• OPC UA client and server

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• CP600 2nd gen. brilliant colored
  display
• Aluminium enclosure
• Operating temp.: 0...60 °C
• Three different screen sizes
• CP600 available in parallel

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• CP600-Pro multi-touch
• Brilliant real glass screen
• Aluminium enclosure
• Fast ETH 10/100/1000
• Operating temp.: -20...+60 °C
• Five different screen sizes
  from 5" to 21.5"

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• CP600-eCo slim design for easy
  installation even in compact spaces
• Robust plastic enclosure
• Three different screen sizes

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CP600-eCo, CP600 and CP600-Pro
Ordering data

CP600-eCo control panels

Display size	Resolution pixels	Description	Type	Order code	Price	Weight (1 pce) kg
4.3"	480 x 272	for PB610 applications	CP604	1SAP504100R0001		0.400
7.0"	800 x 480	for PB610 applications	CP607	1SAP507100R0001		0.600
10.1"	1024 x 600	for PB610 applications or visualization of AC500 V3 web server	CP610	1SAP510100R0001		1.000
4.3"	480 x 272	black, for PB610 applications	CP604-B	1SAP504100R2001		0.400
7.0"	800 x 480	black, for PB610 applications	CP607-B	1SAP507100R2001		0.600
10.1"	1024 x 600	black, for PB610 applications or visualization of AC500 V3 web server	CP610-B	1SAP510100R2001		1.000

Visualization of AC500 V3 web server is supported by products with revision index C1 or higher.

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CP604

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CP607

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CP610

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CP607-B

CP600 2nd generation control panels

Display size	Resolution pixels	Description	Type	Order code	Price	Weight (1 pce) kg
7"	800 x 480	for PB610 applications or visualization of AC500 V3 web server	CP6407	1SAP540710R0001		1.000
10.4"	800 x 600	for PB610 applications or visualization of AC500 V3 web server	CP6410	1SAP541010R0001		2.000
15"	1024 x 768	for PB610 applications or visualization of AC500 V3 web server	CP6415	1SAP541510R0001		3.300

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CP6407

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CP6410

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CP6415

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CP600-eCo, CP600 and CP600-Pro
Ordering data

CP600 control panels

Display size	Resolution pixels	Description	Type	Order code	Price	Weight (1 pce) kg
4.3"	480 x 272	for PB610 Panel Builder 600 applications	CP620	1SAP520100R0001		0.950
4.3"	480 x 272	for visualization of AC500 V2 web server	CP620-WEB	1SAP520200R0001		0.950
5.7"	320 x 240	for PB610 Panel Builder 600 applications	CP630	1SAP530100R0001		1.150
5.7"	320 x 240	for visualization of AC500 V2 web server	CP630-WEB	1SAP530200R0001		1.150
7.0"	800 x 480	for PB610 Panel Builder 600 applications	CP635	1SAP535100R0001		1.100
7.0"	800 x 480	black, for PB610 Panel Builder 600 applications	CP635-B	1SAP535100R2001		1.100
7.0"	800 x 480	for visualization of AC500 V2 web server	CP635-WEB	1SAP535200R0001		1.100
10.4"	800 x 600	for PB610 Panel Builder 600 applications	CP651	1SAP551100R0001		2.100
10.4"	800 x 600	for visualization of AC500 V2 web server	CP651-WEB	1SAP551200R0001		2.100
12.1"	800 x 600	for PB610 Panel Builder 600 applications	CP661	1SAP561100R0001		2.800
12.1"	800 x 600	for visualization of AC500 V2 web server	CP661-WEB	1SAP561200R0001		2.800
13.3"	1280 x 800	for PB610 Panel Builder 600 applications	CP665	1SAP565100R0001		2.600
13.3"	1280 x 800	for visualization of AC500 V2 web server	CP665-WEB	1SAP565200R0001		2.600
15"	1024 x 768	for PB610 Panel Builder 600 applications	CP676	1SAP576100R0001		3.600
15"	1024 x 768	for visualization of AC500 V2 web server	CP676-WEB	1SAP576200R0001		3.600

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CP635

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CP651

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CP665

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CP635-B

CP600-Pro control panels

Display size	Resolution pixels	Description	Type	Order code	Price	Weight (1 pce) kg
5.0"	800 x 480	for PB610 applications or visualization of AC500 V3 web server	CP6605	1SAP560510R0001		1.000
7.0"	800 x 480	for PB610 applications or visualization of AC500 V3 web server	CP6607	1SAP560710R0001		1.300
10.1"	1280 x 800	for PB610 applications or visualization of AC500 V3 web server	CP6610	1SAP561010R0001		1.700
15.6"	1366 x 768	for PB610 applications or visualization of AC500 V3 web server	CP6615	1SAP561510R0001		4.100
21.5"	1920 x 1080	for PB610 applications or visualization of AC500 V3 web server	CP6621	1SAP562110R0001		6.100

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CP6605

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CP6610

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CP6621

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CP600-eCo, CP600 and CP600-Pro
Ordering data

CP600 control panels, sanitary design

Display size	Resolution pixels	Description	Type	Order code	Price	Weight (1 pce) kg
7.0"	800 x 480	stainless steel frame, front: IP69, blue for PB610 Panel Builder 600 applications	CP635-FB	1SAP535110R6001		2.500
7.0"	800 x 480	stainless steel frame, front: IP69, white for PB610 Panel Builder 600 applications	CP635-FW	1SAP535110R1001		2.500

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CP635-FB

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CP635-FW

Communication cables (connection control panel <--> PLC)

Description	Type	Order code	Price	Weight (1 pce) kg
Communication cable RS232: CP600-eCo, CP600 2nd gen., CP600, CP600-Pro <--> AC500	TK681	1SAP500981R0001		0.130
Communication cable RS485: CP600-eCo, CP600 2nd gen., CP600, CP600-Pro <--> AC500-eCo	TK682	1SAP500982R0001		0.130

Programming software licenses

Description	Type	Order code	Price	Weight (1 pce) kg
PB610 Panel Builder 600, engineering tool license for CP600-eCo, CP600 2nd gen., CP600, CP600-Pro control panels and PB610-R PC-runtime, for stand-alone installation via Automation Builder installer. PB610 is included in Automation Builder Standard.	PB610	1SAP500900R0101		0.005
PB610-R Panel Builder 600 runtime license for running a PB610 application on one Windows 32-/64-Bit platform. Installation via Automation Builder installer.	PB610-R	1SAP500901R0101		0.005

CP600 platform selection guide for tailor made HMI applications

CP600-eCo	for PB610 HMI applications; CP610: Or visualization of AC500 V3 web server (*)
CP600 2nd gen.	for PB610 HMI applications or visualization of AC500 V3 web server
CP600	for PB610 HMI applications
CP600-WEB	for visualization of AC500 V2 web server
CP600-Pro	for PB610 HMI applications or visualization of AC500 V3 web server

(*) Supported by products with revision index C1 or higher

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CP600-eCo series
Technical data

Type	CP604 CP604-B	CP607 CP607-B	CP610 CP610-B
Application	control panels for PB610 Panel Builder 600 applications		
	-	-	visualization of AC500 V3 web server (*)
Display			
Exact display size diameter	4.3" widescreen	7" widescreen	10.1" widescreen
Resolution	480 x 272 pixels	800 x 480 pixels	1024 x 600 pixels
Display type, colors	TFT-LCD, 65536 colors		
Touch screen material	glass covered by plastic film		
Touch screen type	single-touch, analog resistive, 4 wires		
Backlight type, life	LED, 20 000 h typ at 25 °C		
Brightness	150 cd/m²	200 cd/m²	
System resources			
Processor type	ARM Cortex-A8; 300 MHz	ARM Cortex-A8; 300 MHz	ARM Cortex-A8; 1 GHz
Operating system, version	Linux RT		
Application memory	for HMI projects of 30 MB in total plus 30 MB for fonts		
Interfaces			
Ethernet ports, number, type	1 - 10/100 Mbit		
USB Host ports number, type	1 - ver. 2.0		
Serial ports number, type	1 - RS-232/-485/-422 software configurable		
Card slot number, type	none		
Power supply			
Power supply voltage nominal, tolerance	24 V DC, 18…32 V DC		
Current consumption at nominal voltage	0.25 A	0.3 A	0.4 A
Backup power type	Supercapacitor, 72 h at 25 °C		
Enclosure			
Degree of protection front, rear	IP66, IP20		
Front frame material	Plastic		
Reverse side material	Plastic		
Weight	0.4 kg	0.6 kg	1.0 kg
Faceplate dimensions (L x H)	147 mm x 107 mm	187 mm x 147 mm	282 mm x 197 mm
Faceplate depth	5 mm		6 mm
Enclosure depth	29 mm		
Cutout dimensions (L x H)	136 mm x 96 mm	176 mm x 136 mm	271 mm x 186 mm
Environmental conditions			
Operating temperature range	0…50 °C		
Operating humidity range	5…85 % relative humidity, non-condesing		
Storage temperature range	-20…+70 °C		
Storage humidity range	5…85 % relative humidity, non-condesing		
Approvals	See detailed page 248 or www.abb.com/plc		

(*) Supported by products with revision index C1 or higher

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CP600 series, 2nd generation
Technical data

Type	CP6407	CP6410	CP6415
Application	control panels for PB610 Panel Builder 600 applications or visualization of AC500 V3 web server		
Display			
Exact display size diameter	7" widescreen	10.4"	15"
Resolution	800 x 480 pixels	800 x 600 pixels	1024 x 768 pixels
Display type, colors	TFT-LCD, 65536 colors		
Touch screen material	glass covered by plastic film		
Touch screen type	single-touch, analog resistive, 4 wires		
Backlight type, life	LED, 40 000 h typ at 25 °C		
Brightness	400 cd/m²		
System resources			
Processor type	ARM Cortex-A8; 1 GHz		
Operating system, version	Linux RT		
Application memory	150 MB		
Interfaces			
Ethernet ports, number, type	2 - 10/100 Mbit (with integrated bridge function)		
USB Host ports number, type	2 - ver. 2.0		
Serial ports number, type	1 - RS-232/-485/-422 software configurable		
Card slot number, type	1 - SD card slot		
Power supply			
Power supply voltage nominal, tolerance	24 V DC, 18…32 V DC		
Current consumption at nominal voltage	0.35 A	0.4 A	0.7 A
Backup power type, capacity	Rechargeable Lithium battery, not user-replaceable		
Enclosure			
Degree of protection front, rear	IP66, IP20		
Front frame material	aluminium		
Reverse side material	aluminium		
Weight	1 kg	2 kg	3.3 kg
Faceplate dimensions (L x H)	187 mm x 147 mm	287 mm x 232 mm	392 mm x 307 mm
Faceplate depth	4 mm		
Enclosure depth	40 mm	40 mm	45 mm
Cutout dimensions (L x H)	176 mm x 136 mm	276 mm x 221 mm	381 mm x 296 mm
Environmental conditions			
Operating temperature range	0…60 °C		
Operating humidity range	5… 85 % relative humidity, non-condensing		
Storage temperature range	-20…+70 °C		
Storage humidity range	5… 85 % relative humidity, non-condensing		
Approvals	See detailed page 248 or www.abb.com/plc		

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CP600 series
Technical data

Type	CP620	CP630	CP635, CP635-B	CP651	CP661	CP665	CP676
Application	control panels for PB610 Panel Builder 600 applications						
Type	**CP620-WEB**	**CP630-WEB**	**CP635-WEB**	**CP651-WEB**	**CP661-WEB**	**CP665-WEB**	**CP676-WEB**
Application	control panels for visualization of AC500 V2 web server						
Display							
Exact display size diameter	4.3" widescreen	5.7"	7" widescreen	10.4"	12.1"	13.3" widescreen	15"
Resolution	480 x 272 pixels	320 x 240 pixels	800 x 480 pixels	800 x 600 pixels	800 x 600 pixels	1280 x 800 pixels	1024 x 768 pixels
Display type, colors	TFT-LCD, 65536 colors						
Touch screen material	glass covered by plastic film						
Touch screen type	single-touch, analog resistive, 4 wires						
Backlight type, life	LED, 40 000 h typ at 25 °C						
Brightness	150 cd/m²	200 cd/m²	300 cd/m²				
System resources							
Processor type	ARM Cortex A8: 600 MHz			ARM Cortex A8: 1 GHz			
Operating system, version	Microsoft Windows CE 6.0 Core						
Application memory	for HMI projects of up to 30 MB in total			for HMI projects of up to 60 MB in total			
Interfaces							
Ethernet ports, number, type	2 - 10/100 Mbit (with integrated switch fuction)						
USB Host ports number, type	1 - ver. 2.0	2 - 1 ver. 2.0, 1 ver. 2.0 and ver. 1.1					
Serial ports number, type	1 - RS-232/-485/-422 software configurable						
Card slot number, type	1 - SD card slot						
Power supply							
Power supply voltage nominal, tolerance	24 V DC, 18…32 V DC						
Current consumption at nominal voltage	0.4 A	0.7 A	0.7 A	1.0 A	1.05 A	1.15 A	1.4 A
Backup power type	Rechargeable Lithium battery, not user-replaceable						
Enclosure							
Degree of protection front, rear	IP66, IP20						
Front frame material	Zamak			Aluminium			
Reverse side material	Zamak	Aluminium					
Weight	0.95 kg	1.15 kg	1.1 kg	2.1 kg	2.8 kg	2.6 kg	3.8 kg
Faceplate dimensions (L x H)	147 x 107 mm	187 x 147 mm		287 x 232 mm	336 x 267 mm		392 x 307 mm
Faceplate depth	4 mm						
Enclosure depth	52 mm	47 mm		56 mm			60 mm
Cutout dimensions (L x H)	136 x 96 mm	176 x 136 mm		276 x 221 mm	326 x 256 mm		381 x 296 mm
Environmental conditions							
Operating temperature range	0…50 °C						
Operating humidity range	5…85 % relative humidity, non-condesing						
Storage temperature range	-20…+70 °C						
Storage humidity range	5…85 % relative humidity, non-condesing						
Approvals	See detailed page 248 or www.abb.com/plc						

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CP600-Pro series
Technical data

Type	CP6605	CP6607	CP6610	CP6615	CP6621
Application	control panels for PB610 Panel Builder 600 applications or visualization of AC500 V3 web server				
Display					
Exact display size diameter	5" widescreen	7" widescreen	10.1" widescreen	15.6" widescreen	21.5" widescreen
Resolution	800 x 480 pixels	800 x 480 pixels	1280 x 800 pixels	1366 x 768 pixels	1920 x 1080 pixels
Display type, colors	TFT-LCD, 65536 colors	TFT-LCD, 16 Mio colors			
Touch screen material	true glass, black passepartou				
Touch screen type	multi-touch, 2-points gestures, PCAP, projected capacitive touchscreen				
Backlight type, life time	LED, 40 000 h typ at 25 °C				
Brightness	300 cd/m²	500 cd/m²	500 cd/m²	300 cd/m²	300 cd/m²
System resources					
Processor type	ARM Cortex-A8; 1 GHz	ARM Cortex-A9 dual core; 800 MHz	ARM Cortex-A9 dual core; 800 MHz	ARM Cortex-A9 quad core; 800 MHz	ARM Cortex-A9 quad core; 800 MHz
Operating system, version	Linux RT				
Application memory	for HMI projects of up to 240 MB in total				
Interfaces					
Ethernet ports, number, type	2 - 10/100 Mbit (with integrated bridge function)	2 - 10/100 Mbit (with integrated bridge function) 1 - 10/100/1000 Mbit			
USB Host ports, number, type	1 - ver. 2.0	2 - ver. 2.0			
Serial ports number, type	1 - RS-232/-485/-422 software configurable				
Card slot number, type	1 - SD card slot				
Power supply					
Power supply voltage nominal, tolerance	24 V DC, 18...32 V DC				
Current consumption at nominal voltage	1.0 A	0.7 A	1.0 A	1.2 A	1.7 A
Backup power type, capacity	Rechargeable Lithium battery, not user-replaceable				
Enclosure					
Degree of protection front, rear	IP66, IP20				
Front frame material	aluminium, black				
Reverse side material	aluminium				
Weight	1.0 KG	1.3 kg	1.7 kg	4.1 kg	6.1 kg
Faceplate dimensions (L x H)	147 mm x 107 mm	187 mm x 147 mm	282 mm x 197 mm	422 mm x 267 mm	552 mm x 347 mm
Faceplate depth	8.5 mm	8.5 mm	8.5 mm	8.5 mm	8.5 mm
Enclosure depth	52 mm	47 mm	52 mm	56 mm	56 mm
Cutout dimensions (L x H)	136 mm x 96 mm	176 mm x 136 mm	271 mm x 186 mm	411 mm x 256 mm	541 mm x 336 mm
Environmental conditions					
Operating temperature range	-20…+60 °C				
Operating humidity range	5…85 % relative humidity, non-condensing				
Storage temperature range	-20…+70 °C				
Storage humidity range	5…85 % relative humidity, non-condensing				
Approvals	See detailed page 248 or www.abb.com/plc				

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CP600 sanitary design
Technical data

Type	CP635-FB	CP635-FW
Application	control panels, sanitary design for PB610 Panel Builder 600 applications	
Display		
Exact display size diameter	7" widescreen	
Resolution	800 x 480 pixels	
Display front color	blue, RAL 5010	white, RAL 9003
Display type, colors	TFT type, 65536 colors	
Touch screen material	glass covered by protection foil	
Touch screen type	single-touch, PCAP, projected capacitive touchscreen	
Backlight type, life time	LED, 40 000 h typ at 25 °C	
Brightness	400 cd/m²	
System resources		
Processor type	ARM Cortex A8: 1 GHz	
Operating system, version	Microsoft Windows CE 6.0 Core	
Memory	for HMI projects of up to 60 MB in total	
Interfaces		
Ethernet ports, number, type	2 – 10/100 Mbit (with integrated switch function)	
USB Host ports, number, type	2 – 1 ver. 2.0, 1 ver. 2.0 and ver. 1.1	
Serial ports number, type	1 – RS-232/-485/-422 software configurable	
Card slot number, type	1 – SD card slot	
Power supply		
Power supply voltage nominal, tolerance	24 V DC, 18…32 V DC	
Current consumption at nominal voltage	0.9 A	
Backup power type, capacity	Rechargeable Lithium battery, not user-replaceable	
Enclosure		
Degree of protection front, rear	IP69, IP20	
Front frame material	stainless steel	
Reverse side material	aluminium	
Weight	2.5 kg	
Faceplate dimensions (L x H)	215 mm x 175 mm	
Faceplate depth	9.5 mm	
Enclosure depth	46 mm	
Cutout dimensions (L x H)	176 mm x 136 mm	
Environmental conditions		
Operating temperature range	-20…+60 °C	
Operating humidity range	5…85 % relative humidity, non-condensing	
Storage temperature range	-40…+85 °C	
Storage humidity range	5…85 % relative humidity, non-condensing	
Approvals	See detailed page 248 or www.abb.com/plc	