

PanelView Plus 6 Specifications

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PanelView™ Plus 6 terminals are used for applications with a need to monitor, control, and display information graphically, allowing operators to quickly understand the status of their application. All PanelView Plus 6 applications are programmed with FactoryTalk® View Studio for Machine Edition (ME) software and have FactoryTalk View ME Station (runtime) software that is installed on each terminal.

This family provides a broad range of rugged terminals that provide these features:

- Premier integration with the Integrated Architecture™ platform
- Scalable 4-inch to 15-inch displays with touch screen, keypad, or both for input
- Common development software
- Real-time monitoring of a terminal's displays via a web browser (7-inch to 15-inch displays)

Use this document along with the Visualization Solutions Selection Guide, publication [VIEW-SG001](#), to make decisions on the visualization solutions that are best suited for your system requirements.

Industrial automation

Elincom Group

 European Union: www.elinco.eu

 Russia: www.elinc.ru

Summary of Changes

This migration guide contains new and updated information. Changes throughout this revision are marked by change bars as shown to the left of this paragraph.

Topic	Pages
Added information about free user memory available for PanelView Plus 6 terminals.	4, 5, 7, 8, 11

Environmental Specifications

The environmental certifications in [Table 1](#) apply to these PanelView Plus 6 terminals:

- PanelView Plus 6 - 700...1500 terminals including logic, communication modules, and display modules
- PanelView Plus 6 - 400 and 600 terminals
- PanelView Plus 6 Compact 400, 600, and 1000 terminals

Table 1 - Environmental Specifications - PanelView Plus 6 Terminals

Attribute	2711P, 2711PC
Temperature, operating	0...55 °C (32...131 °F)
Temperature, nonoperating	-25...+70 °C (-13...+158 °F)
Heat dissipation 400, 600 700, 1000, 1250, 1500	85 BTU/hr 240 BTU /hr
Relative humidity	5...95% noncondensing (5...90% noncondensing only for low reflective terminal, catalog number 2711P-B4C20D8-LR)
Vibration	10...57 Hz, 0.012 peak-to-peak displacement 57...500 Hz, 2 g peak acceleration
Altitude, operating	2000 m (6561 ft)
Shock, operating	15 g at 11 ms
Shock, nonoperating	30 g at 11 ms
Enclosure ratings 400 and 600 700...1500	NEMA/UL Type 12, 13, 4X (indoor use only), and IEC IP66 NEMA/UL Type 12, 13, 4X (indoor use only) ⁽¹⁾ , and IEC IP54, IP65
Airborne contaminants	For PanelView Plus 6 conformal-coated PCBA level products with catalog numbers that end in K, these specifications apply: ANSI/ISA S71.04 - 1985 Severity Level G3 EN60654-4: 1998 Class 3

(1) The 2711P-RDT12H is rated for NEMA 4x Outdoor use.

Certifications

The certifications in [Table 2](#) apply to these PanelView Plus 6 terminals:

- PanelView Plus 6 - 700...1500 terminals including logic, communication modules, and display modules
- PanelView Plus 6 - 400 and 600 terminals
- PanelView Plus 6 Compact 400, 600, and 1000 terminals

Table 2 - Certifications - PanelView Plus 6 Terminals

Certification ⁽¹⁾	2711P, 2711PC
c-UL-us	cULus Listed Industrial Control Equipment for use in Hazardous Locations (E10314) per standards ANSI / ISA 12.12.01 and CSA C22.2 No. 213. rated: <ul style="list-style-type: none"> • Class I, Div 2, Groups A, B, C and D • Class II, Div 2, Groups F and G • Class III Hazardous Locations Enclosure type ratings per UL50 and CSA C22.2 No. 94.2-07.
CE (EMC)	European Union 2004/108/EC EMC Directive, compliant with: <ul style="list-style-type: none"> EN 61000-6-2; Industrial Immunity EN 61000-6-4; Industrial Emissions
CE (LVD)	European Union 2006/95/EC Low Voltage Directive, compliant with: <ul style="list-style-type: none"> EN 61131-2; Programmable Controllers
RMS or C-Tick	Certified <ul style="list-style-type: none"> Australian Radiocommunications Act, compliant with: AS/NZS CISPR 11; Industrial Emissions
RoHS	China RoHS, Turkey RoHS, European RoHS
KCC	Certificate of compliance
Marine ⁽²⁾	Components that are identified as marine-certified meet the requirements of one or more marine societies. For marine-certified components, refer to the Product Certification link below this table.

(1) When marked on product or otherwise declared. See the Product Certifications page at <http://www.rockwellautomation.com/rockwellautomation/certification/overview.page> for Declarations of Conformity, Certificates, and other certification details.

(2) The touch and combination keypad/touch versions of the 700 and 1000 display modules and all logic modules are marine certified.

PanelView Plus 6 - 700...1500 Terminals

The PanelView Plus 6 - 700...1500 terminals use modular components that allow for flexible configuration, installation, and upgrades. Factory-assembled terminals, with a display module and logic module, are available as one catalog number or as separate components for field installation. Optional communication modules can be ordered for additional network communication.



The field-replaceable 6.5, 10.4, 12.1, and 15.1-in. flat-panel color displays come with keypad, touch screen, or keypad/touch-screen input. Other display options are available to meet more stringent environmental conditions:

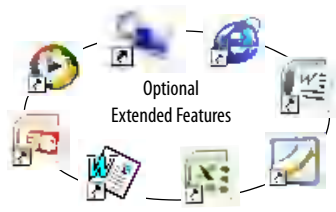
- High-bright display module for outdoor applications
- Conformal-coated displays
- Marine-certified displays and logic modules
- Displays with built-in antiglare overlays

For a complete listing of catalog number selections, refer to the Visualization Solutions Selection Guide, publication [VIEW-SG001](#).

The high-performance logic module runs the Windows CE 6.0 operating system, that allows you to run HMI applications with the ability to also access the desktop. For users with more complex application requirements, the platform and logic module can be ordered with optional, extended features and file viewers.

Table 3 - Logic Module Features

Features	Description
High memory capacity	512 MB RAM, 512 MB nonvolatile memory (approx. 79 MB free user memory)
Power input	AC or DC
Network interface	For optional Ethernet, DH+™, DH-485, or ControlNet communication module
Communication ports	Ethernet, RS-232 serial
USB ports	2 USB host ports for connecting a USB mouse, keyboard, printer, and USB flash drives that are hot swappable
Secure Digital (SD) card slot	Hot-swappable card slot supports 1784-SDx SD cards for transferring files, upgrading firmware, or logging data
Operating system	<p>All terminals run the Windows CE 6.0 operating system (OS) providing OS functionality that is needed for most users needs:</p> <ul style="list-style-type: none"> • FTP server • VNC client/server • PDF reader • Active X controls • Third-party device support <p>Additional functionality is available by ordering terminals with optional, extended features:</p> <ul style="list-style-type: none"> • Internet Explorer™ web browser • Remote desktop connection • Media player • Microsoft file viewers for PowerPoint, Excel, and Word • WordPad text editor
FactoryTalk View software	<ul style="list-style-type: none"> • FactoryTalk View Machine Edition Station runtime, version 6.0 or later, is preloaded and activated on each terminal • Single license support for FactoryTalk ViewPoint software, version 1.2 or later, gives remote users access to a terminal's displays via standard web browser • HMI applications are developed with FactoryTalk View Studio for Machine Edition software, which is purchased separately
Reset and default switches	Provide easy access to diagnostic and repair operations



Technical Specifications

[Table 4](#) provides technical specifications for PanelView Plus 6 - 700...1500 terminals.

Table 4 - Technical Specifications - PanelView Plus 6 - 700...1500 Terminals

Attribute	700 Color ⁽²⁾		1000 Color ⁽²⁾		1250 Color ⁽²⁾		1500 Color ⁽²⁾	
	2711P-K7C4Dx, 2711P-T7C4Dx, 2711P-B7C4Dx, 2711P-K7C4Ax, 2711P-T7C4Ax, 2711P-B7C4Ax		2711P-K10C4Dx, 2711P-T10C4Dx, 2711P-B10C4Dx, 2711P-K10C4Ax, 2711P-T10C4Ax, 2711P-B10C4Ax		2711P-K12C4Dx, 2711P-T12C4Dx, 2711P-B12C4Dx, 2711P-K12C4Ax, 2711P-T12C4Ax, 2711P-B12C4Ax		2711P-K15C4Dx, 2711P-T15C4Dx, 2711P-B15C4Dx, 2711P-K15C4Ax, 2711P-T15C4Ax, 2711P-B15C4Ax	
Operator input	Keypad, Touch, or Key/Touch		Keypad, Touch, or Key/Touch		Keypad, Touch, or Key/Touch		Keypad, Touch, or Key/Touch	
Display type	Color active-matrix TFT		Color active-matrix TFT		Color active-matrix TFT		Color active-matrix TFT	
Display size	6.5 in.		10.4 in.		12.1 in.		15 in.	
Display area (WxH)	132 x 99 mm (5.2 x 3.9 in.)		211 x 158 mm (8.3 x 6.2 in.)		246 x 184 mm (9.7 x 7.2 in.)		304 x 228 mm (12.0 x 9.0 in.)	
Resolution	640 x 480, 18-bit color graphics				800 x 600, 18-bit color graphics		1024 x 768, 18-bit color graphics	
Luminance	300 cd/m ² (Nits)				300 cd/m ² (Nits) ⁽³⁾			
Backlight	CCFL, 50,000 hours min at 25 °C (77 °F), field replaceable Backlight for 1250 high-bright display module is not replaceable							
Touch screen	8-wire analog resistive Actuation: 1 million presses; operating force: 10...110 g							
Keypad description	Stainless-steel membrane Numeric, navigation, and function keys Actuation: 1 million presses; operating force: 340 g							
Keypad function keys	22 function keys F1...F10 and K1...K12		32 function keys F1...F16 and K1...K16		40 function keys F1...F20 and K1...K20		40 function keys F1...F20 and K1...K20	
Battery (real-time clock)	Battery-backed clock timestamps critical data, accuracy is ±2 minutes per month Battery life: 4 year min at 25 °C (77 °F) Field-replaceable: cat. no. 2711P-RY2032 or equivalent CR2032 coin-cell lithium battery							
Memory	512 MB RAM, 512 MB nonvolatile memory (approx. 79 MB free user memory)							
External storage	Secure Digital (SD) card, cat. no.1784-SDx, supported by hot-swappable SD card slot USB flash drives supported by high-speed, hot-swappable, 2.0 USB host ports							
Operating system	Windows CE 6.0 operating system with or without extended features and Microsoft Office file viewers							
Software	FactoryTalk View Machine Edition software, version 6.0 or later FactoryTalk ViewPoint software, version 1.2 or later							
Communication ports	Ethernet (10/100 Mbps, Auto-MDI/MDI-X), RS-232, (2) USB host, Network interface for optional Ethernet, DH+/DH-485, or ControlNet (scheduled or unscheduled) communication module							
Input voltage, DC	18...32V DC (24V DC nom)							
Power consumption, DC	70 W max (2.9 A at 24V DC), 39 W typical (1.6 A at 24V DC)							
External power supply	Cat. No. 2711P-RSACDIN, safety extra low voltage (SELV) or protective extra-low voltage power supply for 700...1500 DC-powered terminals; 100...240V AC, 120VA max							
Input voltage, AC	100...240V AC, 50...60 Hz							
Power consumption, AC	160VA max, 65VA typical							
Weight, approx ⁽¹⁾	Keypad: 1.8 kg (4.1 lb) Touch: 1.7 kg (3.7 lb)		Keypad: 2.8 kg (6.2 lb) Touch: 2.5 kg (5.6 lb)		Keypad: 3.4 kg (7.5 lb) Touch: 3.2 kg (7.0 lb)		Keypad: 4.5 kg (9.9 lb) Touch: 4.2 kg (9.2 lb)	
Dimensions (HxWxD), approx ⁽¹⁾	Keypad: 193 x 290 x 55 mm 7.58 x 11.40 x 2.18 in. Touch: 179 x 246 x 55 mm 7.04 x 9.68 x 2.18 in.		Keypad: 248 x 399 x 55 mm 9.77 x 15.72 x 2.18 in. Touch: 248 x 329 x 55 mm 9.77 x 12.97 x 2.18 in.		Keypad: 282 x 416 x 55 mm 11.12 x 16.36 x 2.18 in. Touch: 282 x 363 x 55 mm 11.12 x 14.30 x 2.18 in.		Keypad: 330 x 469 x 65 mm 12.97 x 18.46 x 2.55 in. Touch: 330 x 416 x 65 mm 12.97 x 16.37 x 2.55 in.	
Cutout dimensions (HxWxD)	Keypad: 167 x 264 mm 6.57 x 10.39 in. Touch: 154 x 220 mm 6.08 x 8.67 in.		Keypad: 224 x 375 mm 8.8 x 14.75 in. Touch: 224 x 305 mm 8.8 x 12.0 in.		Keypad: 257 x 390 mm 10.11 x 15.35 in. Touch: 257 x 338 mm 10.11 x 13.29 in.		Keypad: 305 x 419 mm 12.0 x 16.5 in. Touch: 305 x 391 mm 12.0 x 15.4 in.	

(1) Weights and dimensions do not include the communication module. Add 95 g (0.21 lb) to the weight for a communication module.

(2) Replace x in catalog number with an 8 or 9. For catalog numbers ending in 9, the Windows CE operating system includes extended features and file viewers; catalog numbers ending in 8 do not support these features.

(3) The 1250 high-bright display module, cat. no. 2711P-RD112H, for outdoor operations, has a luminance of 1000 cd/m² (nit). The backlight is not replaceable.

Terminal Dimensions

Table 5 provides overall dimensions and cutout dimensions for the PanelView Plus 6 - 700...1500 terminals. The 1000 touch or keypad terminal is shown for reference. Other models look similar.

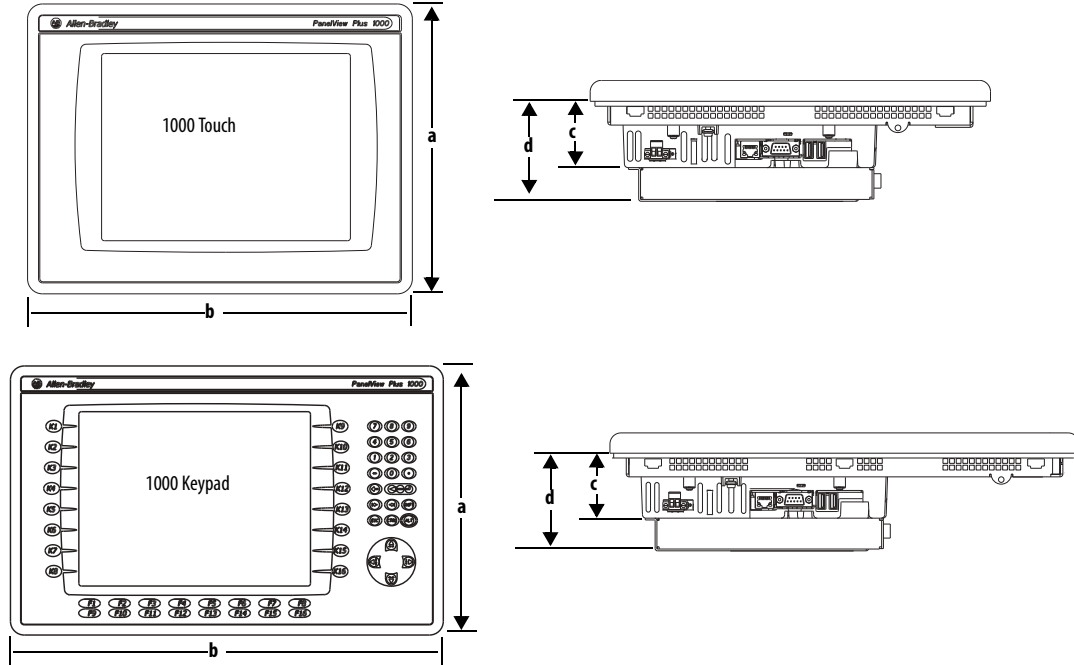


Table 5 - PanelView Plus 6 - 700...1500 Terminal Dimensions

Terminal	Input Type	Height (a) mm (in.)	Width (b) mm (in.)	Depth (c) Display to Logic Module mm (in.)	Depth (d) Display to Communication Module mm (in.)	Cutout Height mm (in.)	Cutout Width mm (in.)		
700	Keypad or keypad/touch	193 (7.58)	290 (11.40)	55 (2.18)	83 (3.27)	167 (6.59)	264 (10.39)		
	Touch	179 (7.04)	246 (9.68)			154 (6.08)	220 (8.67)		
1000	Keypad or keypad/touch	248 (9.77)	399 (15.72)			224 (8.8)	375 (14.75)		
	Touch	248 (9.77)	329 (12.97)			224 (8.8)	305 (12.00)		
1250	Keypad or keypad/touch	282 (11.12)	416 (16.36)			74 (2.9)	101 (3.99)	257 (10.11)	390 (15.35)
	Touch	282 (11.12)	363 (14.30)					257 (10.11)	338 (13.29)
	Touch (high-bright display)	282 (11.12)	363 (14.30)					257 (10.11)	338 (13.29)
1500	Keypad or keypad/touch	330 (12.97)	469 (18.46)			65 (2.55)	93 (3.65)	305 (12.00)	419 (16.50)
	Touch	330 (12.97)	416 (16.37)	305 (12.00)	391 (15.40)				

PanelView Plus 6 - 400 and 600 Terminals

The next generation PanelView Plus 6 - 400 and 600 terminals combine the display, logic, communication, and power into one base unit:

- The 400 model has a 3.5-in. color graphic display with keypad or combination key and touch input, or a grayscale display with keypad input.
- The 600 model has a 5.7-in. color or grayscale graphic display with keypad, touch screen, or combination keypad/touch-screen input.

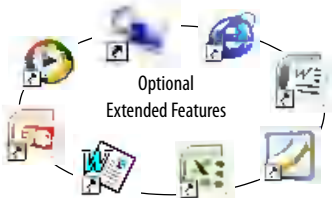


For a complete listing of catalog number selections, refer to the Visualization Solutions Selection Guide, publication [VIEW-SG001](#).

This new generation of terminals runs Windows CE 6.0 operating system similar to the 700...1500 terminals. The terminals run HMI applications but they also provide the ability to access the desktop. For users with more complex application requirements, the 600 color terminals can be ordered with optional, extended features and file viewers.

Table 6 - Terminal Features

Features	Description
High memory capacity	256 MB RAM, 512 MB nonvolatile memory (approx. 73 MB free user memory)
Power input	AC or DC
Communication ports	Units are available with one of these communication options: <ul style="list-style-type: none"> • RS-232 • Ethernet and RS-232 Separate communication modules are not supported.
USB ports	<ul style="list-style-type: none"> • 1 USB host ports for connecting a USB mouse, keyboard, printer, and USB flash drives that are hot swappable • 1 USB device port for connecting a host personal computer
Secure Digital (SD) card slot	Hot-swappable card slot supports 1784-SDx SD cards for transferring files, upgrading firmware, or logging data
Operating system	All terminals run the Windows CE 6.0 operating system (OS) providing OS functionality that is needed for most users needs: <ul style="list-style-type: none"> • FTP server • VNC client/server • PDF reader • Active X controls • Third-party device support Additional functionality is available for the 600 terminals by ordering terminals with these optional, extended features: <ul style="list-style-type: none"> • Internet Explorer web browser • Media player • Microsoft file viewers for PowerPoint, Excel, and Word • WordPad text editor
FactoryTalk View software	<ul style="list-style-type: none"> • FactoryTalk View Machine Edition runtime, version 6.10 or later, is preloaded and activated on each terminal • HMI applications are developed with FactoryTalk View Studio for Machine Edition software, which is purchased separately
Reset and default switches	Provide easy access to diagnostic and repair operations



Technical Specifications

Table 7 provides technical specifications for PanelView Plus 6 - 400 and 600 terminals.

Table 7 - Technical Specifications - PanelView Plus 6 - 400 and 600 Terminals

Attribute	400 Grayscale 2711P-K4M5A8, 2711P-K4M5D8, 2711P-K4M20A8, 2711P-K4M20D8	400 Color 2711P-K4C5A8, 2711P-B4C5A8, 2711P-K4C5D8, 2711P-B4C5D8, 2711P-K4C20A8, 2711P-B4C20A8, 2711P-K4C20D8, 2711P-B4C20D8	600 Grayscale 2711P-K6M5A8, 2711P-T6M5A8, 2711P-B6M5A8, 2711P-K6M5D8, 2711P-T6M5D8, 2711P-B6M5D8, 2711P-K6M20A8, 2711P-T6M20A8, 2711P-B6M20A8, 2711P-K6M20D8, 2711P-T6M20D8, 2711P-B6M20D8	600 Color ⁽¹⁾ 2711P-K6C5Ax, 2711P-T6C5Ax, 2711P-B6C5Ax, 2711P-K6C5Dx, 2711P-T6C5Dx, 2711P-B6C5Dx, 2711P-K6C20Ax, 2711P-T6C20Ax, 2711P-B6C20Ax, 2711P-K6C20Dx, 2711P-T6C20Dx, 2711P-B6C20Dx
Operator input	Keypad	Keypad or keypad/touch	Keypad, touch, or keypad/touch	Keypad, touch, or keypad/touch
Display type	Grayscale TFT LCD	Color active-matrix TFT	Grayscale TFT LCD	Color active-matrix TFT
Display size	3.5 in.	3.5 in.	5.7 in.	
Display area (WxH)	70 x 53 mm (2.8 x 2.3 in.)	70 x 53 mm (2.8 x 2.3 in.)	115 x 86 mm (4.5 x 3.4 in.)	115 x 86 mm (4.5 x 3.4 in.)
Resolution	320 x 240, 16-levels gray	320 x 240, 18-bit color graphics	320 x 240, 16-levels gray	320 x 240, 18-bit color graphics
Brightness	320 cd/m ² (Nits)	320 cd/m ² (Nits)	440 cd/m ² (Nits)	440 cd/m ² (Nits)
Backlight	White LED, not replaceable; 25,000 hours min at 25 °C (77 °F)		White LED, not replaceable; 25,000 hours min at 25 °C (77 °F)	
Touch screen	—	<ul style="list-style-type: none"> Analog resistive, 4-wire Actuation: 1 million presses Operating force: 10...110 g 	<ul style="list-style-type: none"> Analog resistive, 4-wire Actuation: 1 million presses Operating force: 10...110 g 	
Keypad description	<ul style="list-style-type: none"> Stainless-steel membrane Numeric, navigation, and function keys Actuation: 1 million presses; operating force: 340 g 		<ul style="list-style-type: none"> Stainless-steel membrane Numeric, navigation, and function keys Actuation: 1 million presses; operating force: 340 g 	
Keypad function keys	8 function keys (F1...F8)		10 function keys (F1...F10)	
Battery (real-time clock)	Battery-backed clock timestamps critical data, accuracy is ±2 minutes per month Battery life: 4 year min at 25 °C (77 °F) Field-replaceable: cat. no. 2711P-RY2032 or equivalent CR2032 coin-cell lithium battery			
System memory	256 MB RAM, 512 MB nonvolatile memory (approx. 73 MB free user memory)			
External storage	Secure Digital (SD) card, cat. no.1784-SDx, supported by hot-swappable SD card slot USB flash drive that is supported by high-speed, hot-swappable, 2.0 USB host port			
Operating system	Windows CE 6.0 operating system with or without extended features and Microsoft Office file viewers			Windows CE 6.0 operating system with extended features/file viewers
Software	FactoryTalk View Machine Edition software, version 6.10 or later; FactoryTalk ViewPoint software is not supported on the 400 and 600 terminals.			
Communication ports	<ul style="list-style-type: none"> RS-232, 1 USB host, 1 USB device port (catalog numbers with the number 5, for example, 2711P-B4C5D8) Ethernet (10/100 Mbps, Auto-MDI/MDI-X), RS-232, 1 USB host, 1 USB device port (catalog numbers with the number 20, for example, 2711P-B4C20D8) 			
Input voltage, DC	18...30V DC (24V DC nom)			
Power consumption, DC	15 W max (0.6 A at 24V DC), 9 W typical (0.375 A at 24V DC)			
External power supply	Cat. no. 2711P-RSACDIN, Class 2 safety extra low voltage (SELV) or protective extra-low voltage (PELV) isolated power supply for non-isolated 400 and 600 DC-powered terminals; 100...240V AC, 120VA max			
Input voltage, AC	100...240V AC, 50...60 Hz			
Power consumption, AC	35VA max, 20VA typical			
Weight, approx	Keypad: 473 g (1.04 lb) Touch: —		Keypad: 728 g (1.60 lb) Touch: 594 g (1.31 lb)	
Dimensions (HxWxD), approx	Without AC module Keypad: 152 x 185 x 60 mm (6.0 x 7.28 x 2.35in.) With AC module 152 x 185 x 90 mm (6.0 x 7.28 x 3.54 in.) Touch:— —		Keypad: 167 x 266 x 68 mm (6.58 x 10.47 x 2.68 in.) 167 x 266 x 98 mm (6.58 x 10.47 x 3.86 in.) Touch: 152 x 185 x 68 mm (6.0 x 7.28 x 2.68 in.) 152 x 185 x 98 mm (6.0 x 7.28 x 3.86 in.)	
Cutout dimensions (HxW)	Keypad: 123 x 156 mm (4.86 x 6.15 in.) Touch: —		Keypad: 142 x 241 mm (5.61 x 9.50 in.) Touch:123 x 156 mm (4.86 x 6.15 in.)	

(1) Replace x in the catalog number with an 8 or 9. For catalog numbers ending in 9, for example, 2711P-T6C20D9, the Windows CE operating system includes extended features and Microsoft Office file viewers; catalog numbers ending in 8, for example, cat. no. 2711P-T6C20D8, do not support extended features and file viewers.

Terminal Dimensions

Table 8 provides overall dimensions and cutout dimensions for the PanelView Plus 6 - 400 and 600 terminals.

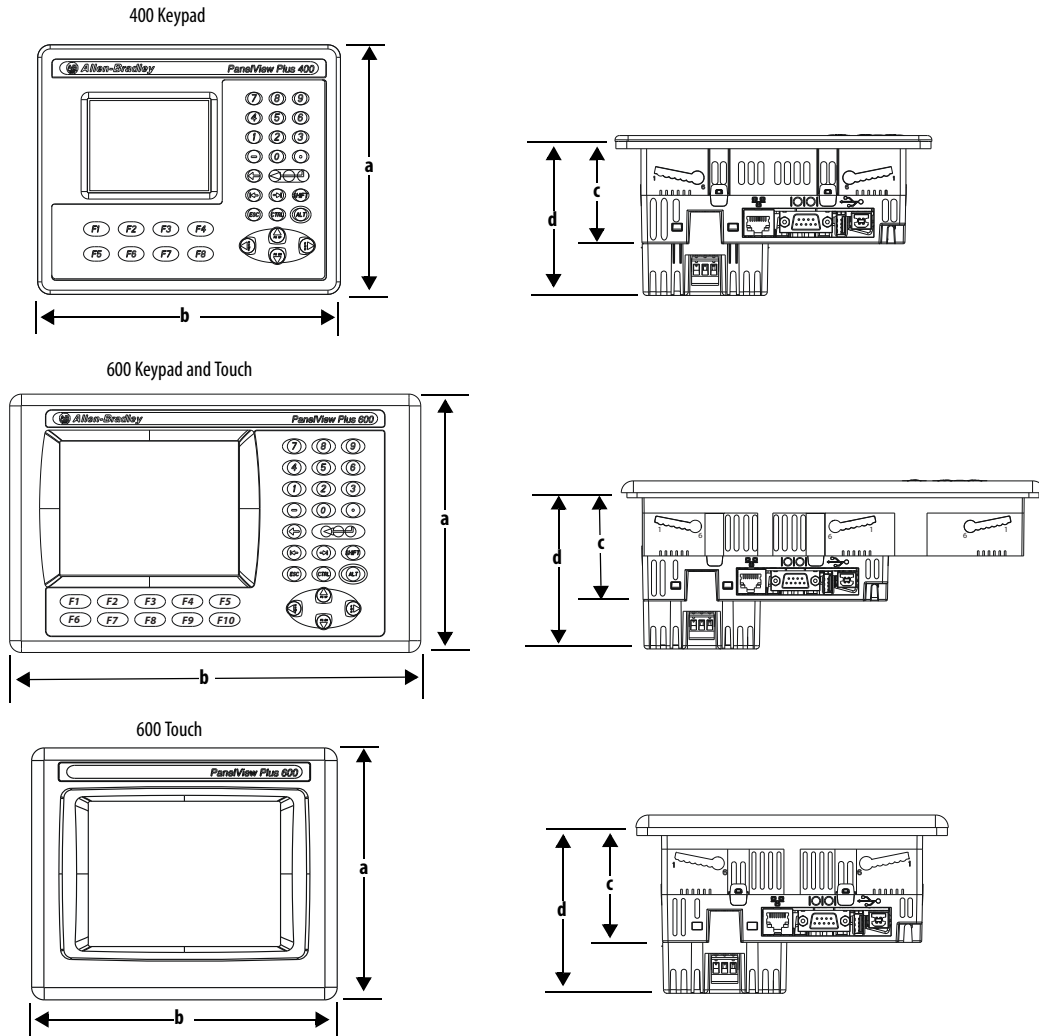


Table 8 - PanelView Plus 6 - 400 and 600 Product Dimensions

Terminal	Input Type	Height (a) mm (in.)	Width (b) mm (in.)	Depth (c) mm (in.)	Depth (d) with AC module mm (in.)	Panel Cutout Width mm (in.)	Panel Cutout Height mm (in.)
400	Keypad or keypad/touch	152 (6.0)	185 (7.28)	60 (2.35)	90 (3.54)	156 (6.15)	123 (4.86)
600	Keypad or keypad/touch	167 (6.58)	266 (10.47)	68 (2.68)	98 (3.86)	241 (9.50)	142 (5.61)
	Touch	152 (6.0)	185 (7.28)	68 (2.68)	98 (3.86)	156 (6.15)	123 (4.86)

PanelView Plus 6 Compact Terminals

The PanelView Plus 6 Compact 400, 600, and 1000 terminals provide a solution for mid-size applications that require fewer displays and alarms in a FactoryTalk View ME application. These terminals are a subset of the PanelView Plus 6 family with selective hardware and software functionality. They are the preferred HMI solution for many of the CompactLogix™ controllers.



These features are the major features of the PanelView Plus 6 Compact terminals:

- Preferred HMI for CompactLogix controllers
- RS-232 serial port, Ethernet port, USB port, DC power input, and Secure Digital (SD) card slot
- Serial and Ethernet communication only
- Connection to a single controller by using either RSLinx® Enterprise software, version 5.51 or later, or KEPServer software
- 25 displays and 200 alarm messages that are supported in the FactoryTalk View Compact Machine Edition application and runtime software
- Fixed hardware configurations without the addition or replacement of modular components

For a complete listing of catalog number selections, refer to the Visualization Solutions Selection Guide, publication [VIEW-SG001](#).

Technical Specifications

[Table 9](#) provides technical specification for PanelView Plus 6 Compact terminals.

Table 9 - Technical Specifications - PanelView Plus 6 Compact Terminals

Attribute	400 Grayscale 2711PC-K4M20D8	400 Color 2711PC-B4C20D8	600 Grayscale 2711PC-T6M20D8	600 Color 2711PC-T6C20D8	1000 Color 2711PC-T10C4D8
Operator input	Keypad	Keypad and touch	Touch	Touch	Touch
Display type	Grayscale TFT LCD	Color active-matrix TFT	Grayscale TFT LCD	Color active-matrix TFT	Color active-matrix TFT
Display size	3.5 in.	3.5 in.	5.7 in.	5.7 in.	10.4 in.
Display area (WxH)	70 x 53 mm (2.8 x 2.3 in.)	70 x 53 mm (2.8 x 2.3 in.)	115 x 86 mm (4.5 x 3.4 in.)	115 x 86 mm (4.5 x 3.4 in.)	211 x 158 mm (8.3 x 6.2 in.)
Resolution	320 x 240, 16-levels gray	320 x 240, 18-bit color	320 x 240, 16-levels gray	320 x 240, 18-bit color	640 x 480, 18-bit color graphics
Luminance	320 cd/m ² (Nits)	320 cd/m ² (Nits)	440 cd/m ² (Nits)	440 cd/m ² (Nits)	300 cd/m ² (Nits)
Backlight	White LED, not replaceable; 25,000 hours min at 25 °C (77 °F)		White LED, not replaceable; 25,000 hours min at 25 °C (77 °F)		CCFL, 50,000 hours min at 25 °C (77 °F), field replaceable
Touch screen	—	Analog resistive 4-wire; actuation 1 million presses; operating force 10...110 g			Analog resistive 8-wire; actuation 1 million presses; operating force 10...110 g
Keypad description	<ul style="list-style-type: none"> Stainless-steel membrane Numeric, navigation, and function keys Actuation: 1 million presses; operating force: 340 g 		—		
Keypad function keys	8 function keys (F1...F8)		—		
Battery (real-time clock)	Battery-backed clock timestamps critical data, accuracy is ±2 minutes per month Battery life: 4 year min at 25 °C (77 °F) Field-replaceable: cat. no. 2711P-RY2032 or equivalent CR2032 coin-cell lithium battery				
Memory	256 MB RAM, 512 MB nonvolatile memory (approx. 73 MB free user memory)				512 MB RAM, 512 MB nonvolatile memory (approx. 79 MB free user memory)
External storage	Secure Digital (SD) card, cat. no.1784-SDx, supported by hot-swappable SD card slot USB flash drive that is supported by high-speed, hot-swappable, 2.0 USB host port				
Operating system	Windows CE 6.0 operating system without extended features and Microsoft Office file viewers				
Software	FactoryTalk View Machine Edition software, version 6.10 or later; FactoryTalk ViewPoint software is not supported				
Communication ports	Ethernet (10/100 Mbps, Auto-MDI/MDI-X), RS-232, 1 USB host, and 1 USB device port.				Ethernet (10/100 Mbps, Auto-MDI/MDI-X), RS-232, 1 USB host.
Input voltage, DC	18...30V DC (24V DC nom)				
Power consumption, DC	15 W max (0.6 A at 24V DC), 9 W typical (0.375 A at 24V DC)				70 W max (2.9 A at 24V DC), 39 W typical (1.6 A at 24V DC)
External power supply	Cat. No. 2711P-RSACDIN, Class 2 safety extra low voltage (SELV) or protective extra-low voltage (PELV) isolated power supply; 100...240V AC, 120VA max				
Weight, approx	473 g (1.04 lb)	473 g (1.04 lb)	594 g (1.31 lb)	594 g (1.31 lb)	2.5 kg (5.6 lb)
Dimensions (HxWxD), approx	152 x 185 x 60 mm 6.0 x 7.28 x 2.35in.	152 x 185 x 60 mm 6.0 x 7.28 x 2.35in.	152 x 185 x 68 mm 6.0 x 7.28 x 2.86 in.	152 x 185 x 68 mm 6.0 x 7.28 x 2.86 in.	248 x 329 x 55 mm 9.77 x 12.97 x 2.18 in.
Cutout dimensions (HxWxD)	123 x 156 mm 4.86 x 6.15 in.	123 x 156 mm 4.86 x 6.15 in.	123 x 156 mm 4.86 x 6.15 in.	123 x 156 mm 4.86 x 6.15 in.	224 x 305 mm 8.8 x 12.0 in.

External Power Supply

This safety extra low voltage (SELV) or protective extra-low voltage (PELV), 24V DC power supply can be used to power any of the PanelView Plus 6 terminals with a DC power input. This power supply provides protection so that under normal and single fault conditions, the voltage between conductors and earth ground does not exceed a safe value.

Table 10 - Environmental Specifications - 2711P-RSACDIN Power Supply

Attribute	2711P-RSACDIN				
Temperature, operating IEC 60068-2-1 (Test Ad, Operating Cold) IEC 60068-2-2 (Test Bd, Operating Dry Heat) IEC 60068-2-14 (Test Nb, Operating Thermal Shock)	0...55 °C (32...131 °F)				
Temperature, storage IEC 60068-2-1 (Test Ab, Unpackaged, Nonoperating Cold) IEC 60068-2-2 (Test Bb, Unpackaged, nonoperating Dry Heat) IEC 60068-2-14 (Test Nb, Unpackaged, nonoperating Thermal Shock)	-40...+85 °C (-40...+185 °F)				
Relative humidity IEC 60068-2-30 (Test Db, Unpackaged, nonoperating Damp Heat)	5...95% noncondensing				
Vibration IEC 60068-2-6 (Test Fc, Operating)	5 g at 10...500 Hz				
Shock, operating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	15 g				
Shock, nonoperating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	30 g				
ESD immunity IEC 61000-4-2	4 kV contact discharges 8 kV air discharges				
Radiated RF immunity IEC 61000-4-3	10V/m with 1 kHz sine-wave 80% AM from 30...1000 MHz				
EFT/B immunity IEC 61000-4-4	±2 kV at 5 kHz on power ports				
Surge transient immunity IEC 61000-4-5	±1 kV line-line (DM) and ±2 kV line-earth (CM) on AC power ports				
Conducted RF immunity IEC 61000-4-6	10V rms with 1 kHz sine-wave 80% AM from 150 kHz...80 MHz				
Enclosure type rating	None (open-style)				
Power conductors	<table border="0"> <tr> <td style="padding-right: 10px;">Wire size</td> <td>12 gauge (4 mm²) max solid or stranded copper wire rated at 75 °C (167 °F) or greater 1.2 mm (3/64 in.) insulation max</td> </tr> <tr> <td>Category</td> <td>1⁽¹⁾</td> </tr> </table>	Wire size	12 gauge (4 mm ²) max solid or stranded copper wire rated at 75 °C (167 °F) or greater 1.2 mm (3/64 in.) insulation max	Category	1 ⁽¹⁾
Wire size	12 gauge (4 mm ²) max solid or stranded copper wire rated at 75 °C (167 °F) or greater 1.2 mm (3/64 in.) insulation max				
Category	1 ⁽¹⁾				

(1) Use this conductor capacity information for planning conductor routing. Refer to Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1.

Table 11 - Certifications - 2711P-RSACDIN Power Supply

Certification ⁽¹⁾	2711P-RSACDIN
c-UL-us	UL Listed Industrial Control Equipment, certified for US and Canada. See UL File E10314. UL Listed for Class, Division 2 Groups A, B, C, and D for US and Canada.
CE	European Union 89/336/EEC EMC Directive, compliant with: <ul style="list-style-type: none"> • EN 61000-6-2; Industrial Immunity • EN 61326, Meas./Control/Lab., Industrial Requirements • EN 61000-6-4; Industrial Emissions European Union 73235/EEC Low Voltage Directive, compliant with: <ul style="list-style-type: none"> • EN 61131-2; Programmable Controllers
C-Tick	Australian Radiocommunications Act, compliant with: AS/NZS 2064, Industrial Emissions

(1) When marked. See the Product Certifications page at <http://www.rockwellautomation.com/rockwellautomation/certification/overview.page> for Declarations of Conformity, Certificates, and other certification details.

Table 12 - Technical Specifications - 2711P-RSACDIN Power Supply

Attribute	2711P-RSACDIN
Input Specifications	
Supply voltage, nom	120V AC, 50...60 Hz, 1.7 A max 230V AC, 50...60 Hz, 1.1 A max
Voltage range	100...240V AC
Inrush current	40 A typical, 1 AC cycle at V_{in} , 240V AC, 55 °C (131 °F)
Interruption	Output voltage stays within specification when input drops out for 1/2 cycle at 50 Hz, 100V AC with max load
Output Specifications	
Output voltage, nom	+24V DC safety extra low voltage (SELV)
Voltage range	20.4...27.6V DC, includes noise and 5% AC ripple
Inrush current	40 A typical, 1 AC cycle at V_{in} , 240V AC, 55 °C (131 °F)
Minimum load	50 mA
Overvoltage protection	Output internally limited to 35V DC. Cycle power to re-energize.
Overcurrent protection	Current limit 3.2 A min (107% min)
Leakage current	0.5 mA rms max at rated input and output
Isolation voltage	2830V DC for 1 second

Table 13 - Dimensions - 2711P-RSACDIN Power Supply

Attribute	2711P-RSACDIN
Mounting	<ul style="list-style-type: none"> • Horizontal on a DIN rail • Wall or panel mount with cat. no. 1794-NM1 panel mounting kit
Terminal screw torque	0.5...0.6 N·m (5...7 lb·in)
Dimensions (HxWxD), approx	87 x 68 x 69 mm (3.4 x 2.7 x 2.7 in.)

HMI Software

All PanelView Plus 6 terminals are configured with FactoryTalk View Studio software and have an integrated runtime system called FactoryTalk View Machine Edition Station.

Machine Edition Station runs projects developed with FactoryTalk View Studio software and is included on all PanelView Plus 6 terminals.

Two versions of FactoryTalk View Studio software support application development for PanelView Plus 6 terminals.

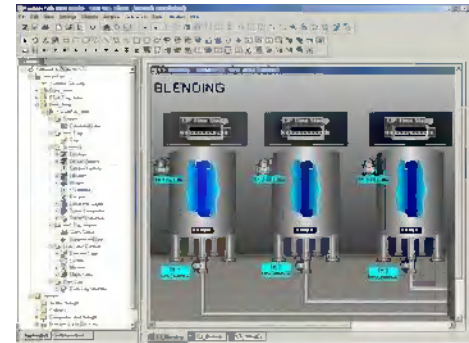


Table 14 - HMI Software for PanelView Plus 6 Terminals

Cat. No. ⁽¹⁾	Description
9701-VWSTMENE	FactoryTalk View Studio for Machine Edition software - Configuration software for developing and testing machine-level human machine interface (HMI) applications. Includes RSLinx® Enterprise and KEPServer Enterprise software.
9701-VWSTENE	FactoryTalk View Studio software - Configuration software for developing and testing machine level and supervisory level human machine interface (HMI) applications.

(1) Order localized versions of the software by replacing EN in the catalog number with DE for German, FR for French, JP for Japanese, or ZH for Chinese.

You can import PanelView Standard/PanelBuilder® 32 and PanelView™ e applications into FactoryTalk View Studio software as Machine Edition applications by using the Machine Edition Import Wizard. The Import Wizard steps you through a few options such as scaling to a new screen resolution size, and then converts objects, text, tags, and communication configurations to ones that are available in Machine Edition.



FactoryTalk ViewPoint software, an add-on to FactoryTalk View Studio software, allows plant managers, production supervisors, system integrators, and other key stakeholders to view and control real-time plant floor operations remotely from a web browser. FactoryTalk ViewPoint enabled displays are fully scalable and animated in the browser. The remote user can also view displays that are not the active display of the terminal.

Each PanelView Plus 6 - 700...1500 terminal contains one license that supports a single client connection to the terminal. No additional software is required. FactoryTalk ViewPoint software is not supported by the PanelView Plus 6 - 400 and 600 terminals.

For a complete list of available HMI software, visit <http://www.rockwellautomation.com/rockwellsoftware>.

Communication Cables

Table 15 through Table 20 list runtime communication cables for PanelView Plus 6 (400, 600, 700, 1000, 1250, 1500) terminals. The PanelView Plus 6 Compact terminals use the same cables as the PanelView Plus 6 - 400 and 600 terminals. All PanelView Plus 6 terminals use a standard Ethernet cable for application transfers between a computer and the terminal.

Table 15 - Communication Cables: PanelView Plus 6 Terminals to PLC-5® Controllers

Terminal Type	PLC-5, PLC-5C, PLC-5E Port: CH0 - 25-pin RS-232 Protocol: DF1	PLC-5, PLC-5C, PLC-5E Port: CH1/CH2 DH+ Protocol: DH+	PLC-5E Port: CH2 Ethernet RJ45 Protocol: EtherNet/IP	PLC-5C Port: ControlNet Port Protocol: ControlNet
PanelView Plus 6 Compact 400, 600, 1000		-		-
PanelView Plus 6 400, 600	2711-NC13 (5 m/16 ft) or 2711-NC14 (10 m/32 ft) cable (Requires DB9 to DB25 adapter)	-	1585J-M type cable or 2711PjCBL-EX04 (4 m/14 ft)	-
PanelView Plus 6 700, 1000, 1250, 1500		Requires 2711P-RN6 or 2711P-RN6K module, with shielded twinaxial cable (1770-CD)		Requires 2711P-RN15S or 2711P-RN15SK module, and 1786 ControlNet media

Table 16 - Communication Cables: PanelView Plus 6 Terminals to SLC™ Controllers

Terminal Type	SLC 5/01, 5/02, 5/03 Port: CH1 - RJ45 Protocol: DH-485	SLC 5/03, 5/04, 5/05 Port: CH0 - 9-pin RS-232 Protocol: DF1 or DH-485 (point-to-point)	SLC 5/04 Port: CH1 Protocol: DH+	SLC 5/05 Port: CH1 - Ethernet - RJ45 Protocol: EtherNet/IP
PanelView Plus 6 Compact 400, 600, 1000	Requires 1761-NET-AIC module, and 2711-NC13 (5 m/16 ft) or 2711-NC14 (10 m/32 ft) cable		-	1585J-M type cable or 2711P-CBL-EX04 (4 m/14 ft)
PanelView Plus 6 400, 600		2711-NC13 (5 m/16 ft) 2711-NC14 (10 m/32 ft)	-	
PanelView Plus 6 700, 1000, 1250, 1500	Requires 2711P-RN6 module, with 1761-CBL-AS03 (3 m/10 ft) or 1761-CBL-AS09 (9 m/30 ft) cable		Requires 2711P-RN6 or 2711P-RN6K module, with shielded twinaxial cable (1770-CD)	

Table 17 - Communication Cables: PanelView Plus 6 Terminals to MicroLogix™ Controllers

Terminal Type	MicroLogix™ 1400, 1500LRP Port: CH1/CH2 - 9-pin RS-232 Protocol: DF1 or DH-485 (point-to-point)	MicroLogix 1000, 1100, 1200, 1400, 1500LSP Port: CH0 - 8-pin Mini-DIN Protocol: DF1 or DH-485 (point-to-point)	MicroLogix 1100, 1400 Port: Ethernet - RJ45 Protocol: EtherNet/IP
PanelView Plus 6 Compact 400, 600, 1000	2711-NC13 (5 m/16 ft) or 2711-NC14 (10 m/32 ft) cable (Requires DB9 to DB25 adapter)	2711-NC21 (5 m/16 ft) or 2711-NC22 (15 m/49 ft)	1585J-M type cable or 2711P-CBL-EX04 (4 m/14 ft)
PanelView Plus 6 400, 600			
PanelView Plus 6 700, 1000, 1250, 1500			

Table 18 - Communication Cables: PanelView Plus 6 Terminals to CompactLogix Controllers

Terminal Type	CompactLogix Port: CH0 - 9-pin RS-232 Protocol: DF1 or DH-485 (point-to-point)	CompactLogix L35E, L23E, L32E, 1768-ENBT Port: Ethernet - RJ45 Protocol: EtherNet/IP	CompactLogix L35CR, L32C, 1768-CNBR, 1768-CNBR Port: ControlNet Port Protocol: ControlNet
PanelView Plus 6 Compact 400, 600, 1000	2711-NC13 (5 m/16 ft) 2711-NC14 (10 m/32 ft)	1585J-M type cable or 2711P-CBL-EX04 (4 m/14 ft)	1786 ControlNet media
PanelView Plus 6 400, 600			
PanelView Plus 6 700, 1000, 1250, 1500			

Table 19 - Communication Cables: PanelView Plus 6 Terminals to ControlLogix™ Controllers

Terminal Type	ControlLogix Port: CH0 - 9-pin RS-232 Protocol: DF1 or DH-485 (point-to-point)	ControlLogix Communication Module: 1756-ENBT, 1756-EN2T Protocol: EtherNet/IP	ControlLogix Communication Module: 1756-CNB Protocol: ControlNet	ControlLogix Communication Module: 1756-DHRIO Protocol: DH+
PanelView Plus 6 Compact 400, 600, 1000	2711-NC13 (5 m/16 ft) 2711-NC14 (10 m/32 ft)	1585J-M type cable or 2711P-CBL-EX04 (4 m/14 ft)	1786 ControlNet media	-
PanelView Plus 6 400, 600				-
PanelView Plus 6 700, 1000, 1250, 1500				Shielded twinaxial cable (1770-CD)

Table 20 - Communication Cables: PanelView Plus 6 Terminals to Interface Modules

Protocol	PanelView Plus 6 Comm Port 400, 600 700, 1000, 1250, 1500	1747-AIC	1761-NET-AIC			1761-NET-ENI
			Port 1 (9-pin)	Port 2 (8-pin Mini DIN)	Port 3 (DH-485)	Port 2 (8-pin Mini DIN)
DF1	RS-232 port All terminals	-	2711-NC13 (5 m/16 ft) 2711-NC14 (10 m/32 ft)	2711-NC21 (5 m/16 ft) 2711-NC22 (15 m/49 ft) Null modem required	-	1761-CBL-AP00 (5 m/16 ft) 1761-CBL-PM02 (2 m/7 ft) 2711-CBL-PM05 (5 m/16 ft) 2711-CBL-PM10 (10 m/32 ft)
DH-485	RS-232 port All terminals	-	2711-NC13 (5 m/16 ft) 2711-NC14 (10 m/32 ft)	2711-NC21 (5 m/16 ft) 2711-NC22 (15 m/49 ft) Null modem required	-	-
	DH-485 port 700 . . . 1500 terminals only Requires 2711P-RN6 or 2711P-RN6K	Direct connection to single AIC with Belden 9842 cable ⁽¹⁾	-	-	Direct connection to single AIC+ with Belden 9842 cable ⁽¹⁾	-

(1) Use the serial port on the PanelView Plus 6 terminal with an AIC+ module for a DH-485 network solution.

Migration Hardware

The PanelView Plus 6 platforms provide a clear migration path for replacing older terminals. When migrating to a new platform, consider both the display size and the unit size. PanelView Plus 6 terminals uses the same panel cutouts as existing PanelView products, yet offer a larger display. For instance, a PanelView Plus 6, 1250 terminal with a 12.1-inch display fits into the same cutout as a PanelView 1000 or 1000e with a 10.4-inch display. When choosing a terminal with the same display size, adapter plates are used to adapt the cutout of the new terminal.

Refer to [Additional Resources on page 18](#) for publications that provide catalog number conversions and migration information for applications.

Table 21 - PanelView Plus 6 Replacement Terminals

PanelView Standard Terminal	PanelView Plus 6 Replacement Terminal	Adapter Plate Required	Adapter Plate Cat. No.
PanelView Standard 300 or 300 Micro	None available ⁽¹⁾	—	—
PanelView 550 or 600 touch	PanelView Plus 6 or PanelView Plus 6 Compact 400 keypad or keypad/touch PanelView Plus 6 or PanelView Plus 6 Compact 600 touch	No	—
PanelView 550 keypad PanelView 550 keypad/touch	PanelView Plus 6, 600 keypad or keypad/touch	No	—
	PanelView Plus 6 or PanelView Plus 6 Compact 400 keypad or keypad/touch PanelView Plus 6 or PanelView Plus 6 Compact 600 touch	Yes	2711P-RAK4
PanelView 600 keypad PanelView 600 keypad/touch	PanelView Plus 6, 600 keypad or keypad/touch	Yes	2711P-RAK6
	PanelView Plus 6, 700 keypad or keypad/touch	No	—
PanelView 900 keypad	PanelView Plus 6, 700 keypad or keypad/touch	Yes	2711P-RAK7
	PanelView Plus 6, 1000 keypad or keypad/touch	No	—
PanelView 900 touch	PanelView Plus 6, 700 touch	Yes	2711P-RAT7
	PanelView Plus 6 or PanelView Plus 6 Compact 1000 touch	No	—
PanelView 1000, 1000e keypad	PanelView Plus 6, 1000 keypad or keypad/touch	Yes	2711P-RAK10
	PanelView Plus 6, 1250 keypad or keypad/touch	No	—
PanelView 1000, 1000e touch	PanelView Plus 6 or PanelView Plus 6 Compact 1000 touch	Yes	2711P-RAT10
	PanelView Plus 6, 1250 touch	No	—
PanelView 1400 keypad	PanelView Plus 6, 1250 keypad or keypad/touch	Yes	2711P-RAK12S
	PanelView Plus 6, 1500 keypad or keypad/touch	No	—
PanelView 1400 touch	PanelView Plus 6, 1250 touch	Yes	2711P-RAT12S
	PanelView Plus 6, 1500 touch	No	—
PanelView 1400e keypad	PanelView Plus 6, 1500 keypad or keypad/touch ⁽²⁾	Yes	2711P-RAK15
	PanelView Plus 6, 1250 keypad or keypad/touch	Yes	2711P-RAK12E
PanelView 1400e touch	PanelView Plus 6, 1500 touch ⁽²⁾	Yes	2711P-RAT15
	PanelView Plus 6, 1250 touch	Yes	2711P-RAT12E
PanelView 1200, 1200e keypad	PanelView Plus 6, 1250 keypad ⁽²⁾	Yes	2711P-RAK12E
PanelView 1200, 1200e touch	PanelView Plus 6, 1250 touch ⁽³⁾	Yes	2711P-RAT12E2

(1) Replace the PanelView Standard 300 or 300 Micro with a PanelView Plus 6 - 400 keypad terminal by increasing the size of the current panel cutout.

(2) Adapter plate required for stud-mounted terminals.

(3) Requires modification of panel cutout.

Additional Resources

These documents contain additional information concerning related products from Rockwell Automation.

Resource	Description
Visualization Solutions Selection Guide, publication VIEW-SG001	Provides an overview of the visualization products, and includes catalog number selections offered by Rockwell Automation.
PanelView 6 Terminals User Manual, publication 2711P-UM006	Provides information on how to install, configure, operate, and troubleshoot the PanelView Plus 6 (400, 600, 700, 1000, 1250, 1500) terminals.
PanelView Plus 6 Compact Terminals User Manual, publication 2711PC-UM002	Provides information on how to install, configure, operate, and troubleshoot the PanelView Plus 6 Compact terminals.
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines for installing a Rockwell Automation® industrial system.
Product Certifications website, http://www.ab.com	Provides declarations of conformity, certificates, and other certification details.

You can view or download publications at <http://www.rockwellautomation.com/literature/>. To order paper copies of technical documentation, contact your local Allen-Bradley distributor or Rockwell Automation sales representative.

Notes:

Rockwell Automation Support

Use the following resources to access support information.

Technical Support Center	Knowledgebase Articles, How-to Videos, FAQs, Chat, User Forums, and Product Notification Updates.	www.rockwellautomation.com/knowledgebase
Local Technical Support Phone Numbers	Locate the phone number for your country.	www.rockwellautomation.com/global/support/get-support-now.page
Direct Dial Codes	Find the Direct Dial Code for your product. Use the code to route your call directly to a technical support engineer.	www.rockwellautomation.com/global/support/direct-dial.page
Literature Library	Installation Instructions, Manuals, Brochures, and Technical Data.	www.rockwellautomation.com/literature
Product Compatibility and Download Center (PCDC)	Get help determining how products interact, check features and capabilities, and find associated firmware.	www.rockwellautomation.com/global/support/pcdc.page

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