

Visualization Solutions



[PanelView Plus Terminals](#)
[PanelView Component Terminals](#)
[Industrial Computers and Monitors](#)

Adding Visualization to Your Control System

As a machine builder or end user, you design control solutions with an eye toward improving safety, higher levels of performance and efficiency, and better integration with the rest of the manufacturing operation. To achieve these goals, you need a scalable, modular control system that offers safety, throughput and information management capabilities to match each application's requirements.

The Rockwell Automation® Integrated Architecture™ system is unique in that it offers scalable, integrated safety, motion control, and visualization capabilities that are ideal for machine builders and end users who want a single control and development environment, regardless of the application size or complexity.

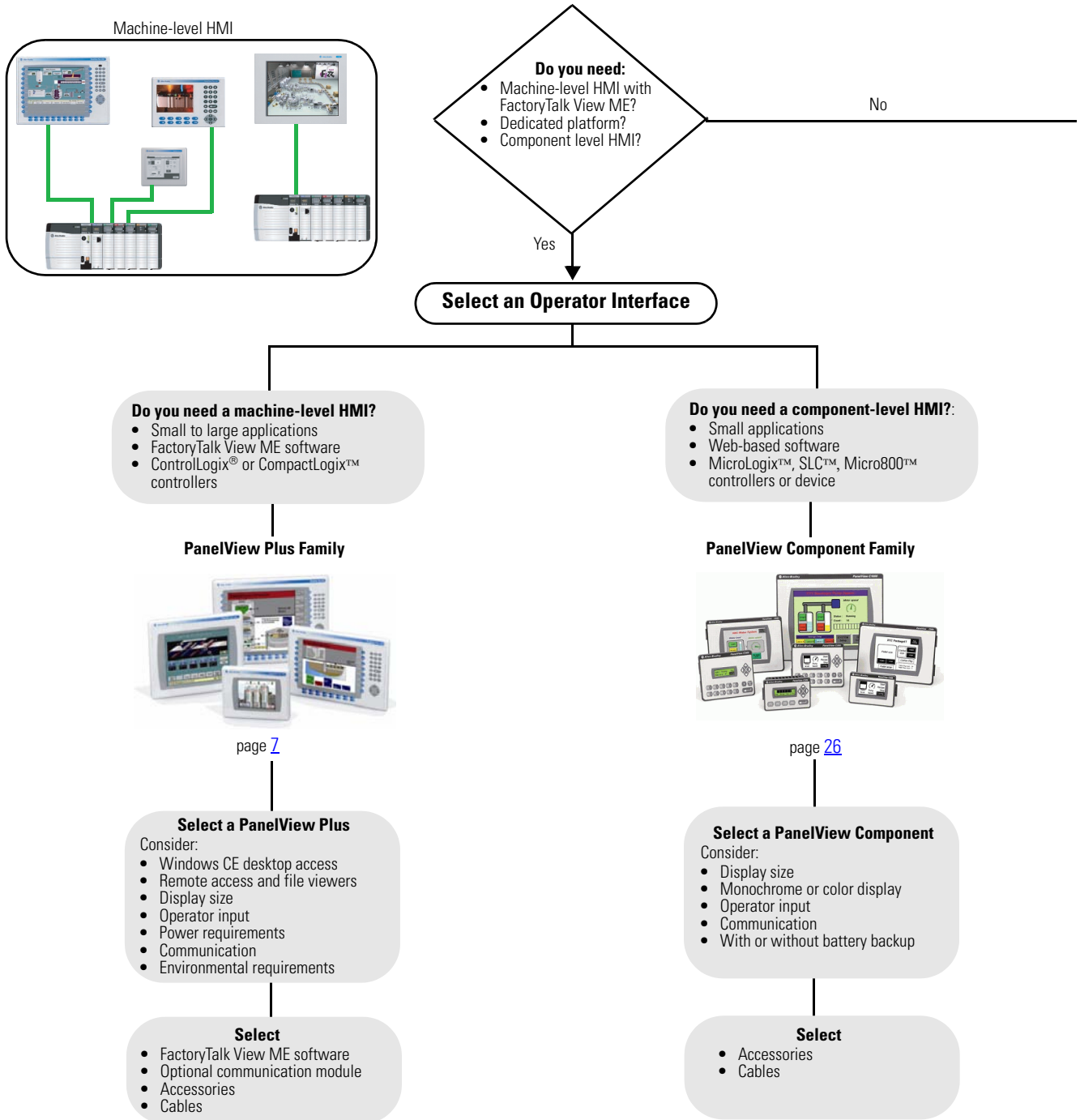
The visualization products comprise a suite of scalable HMI software and operator interface hardware that provide plant floor machine operators, supervisors, engineers, and business managers a window to critical data, and production and process information. And all this can be done from the plant floor or remotely from a web browser.

Whether it's a machine-level or site-level HMI, a Windows CE platform, a smaller component HMI, or an industrial computer, Rockwell Automation has a portfolio of visualization solutions to match your system requirements.

PanelView™ Plus terminals, FactoryTalk® View Machine Edition, and FactoryTalk View Site Edition provide premier integration in a number of ways.

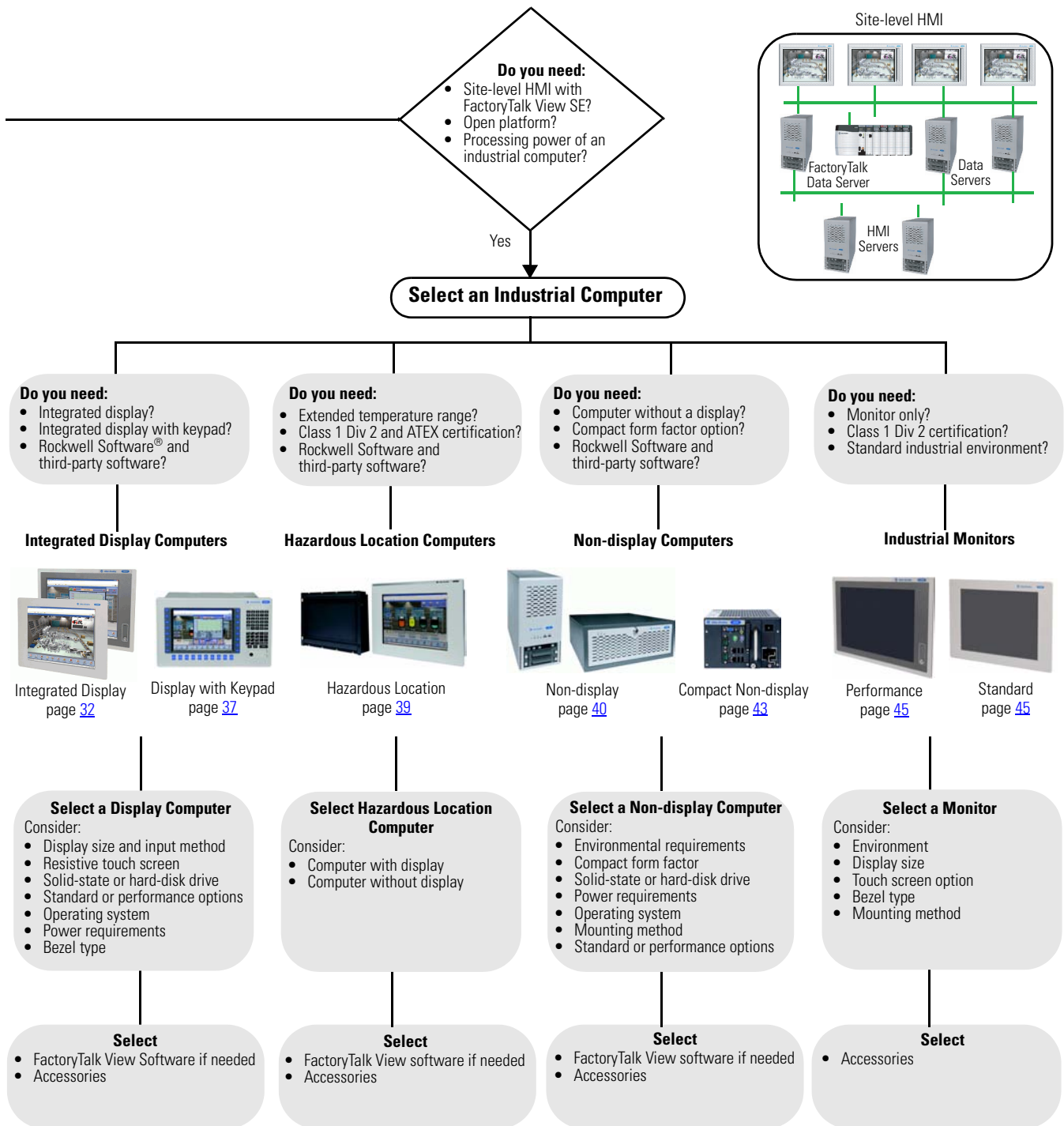
- Reduce programming time with Logix native addressing and the ability to browse directly to Logix tags without creating a separate database.
- Simplifies interaction of all networks with support for all Core Integrated Architecture CIP networks including EtherNet/IP, ControlNet, and numerous other drivers.
- Simplifies development time with pre-engineered, pre-tested faceplates for specific motion, drives, and process applications.

Visualization Platforms



For technical specifications, certifications, and environmental specifications on the PanelView Plus terminals, refer to the PanelView Plus Specifications Technical Data, publication [2711P-TD005](#)

For technical specifications, certifications, and environmental specifications on the PanelView Component terminals, refer to the PanelView Component Specifications Technical Data, publication [2711C-TD001](#)



For technical specifications, certifications, and environmental specifications on the industrial computers and monitors, refer to the Industrial Computers and Monitors Specifications Technical Data, publication [IC-TD001](#).

HMI Terminal Comparison

This table provides a quick glance at comparisons between the different HMI terminal platforms.

Table 1 - HMI Terminal Comparison

Characteristic	2711P PanelView Plus 6 700, 1000, 1250, 1500	2711P PanelView Plus 400, 600	2711P PanelView Plus Compact 400, 600, 1000	2711C PanelView Component C200, C300, C600, C1000
Display	700: 6.5 in. color TFT 1000: 10.4 inch color TFT 1250: 12.1 in. color TFT 1500: 15 in. color TFT	400: 3.5 in. color TFT 400: 3.8 in. grayscale 600: 5.5 in. color TFT 600: 5.5 in. grayscale TFT	400: 3.5 in. color TFT 400: 3.8 in. grayscale 600: 5.5 in. color TFT 100: 10.4 in. color TFT	C200: 2 in. mono C300: 3 in. mono C600: 5.7 in. color TFT or mono C1000: 10.4 in. color TFT
Input type	All models: keypad All models: touch screen All models: key/touch	400: key/touch (3.5 in.) 400: keypad (3.8 in.) 600: touch screen	400: key/touch (3.5 in.) 400: keypad (3.8 in.) 600/1000: touch screen	C200: 4-keys C200: 10-keys+numeric C300: 10-keys+numeric C600/C1000: touch screen
Built-in communication ports	RS-232 EtherNet 2 USB host and 1 USB device	RS-232 EtherNet 1 USB	RS-232 EtherNet 1 USB: 400/600 2 USB: 1000	RS-232 RS-422/RS-485 1 USB host and 1 USB device EtherNet: C600/C1000C only
Add-on communication module	DH+ DH-485 ControlNet	DH+ DH-485 ControlNet	None	None
Serial communication	RS-232: DF1 or DH-485	RS-232: DF1 or DH-485	RS-232: DF1 or DH-485	RS-232: DF1, DH-485, multivendor options, RS-485
Programming software	FactoryTalk View ME 6.0 or later ViewPoint web server 1.2 or later	FactoryTalk View ME 5.1 or earlier	FactoryTalk View ME 5.1 or later	DesignStation 2.0 or later Web-enabled software resident in terminal PC-based emulator available
Operating system	Windows CE 6.0 operating system supports this features: <ul style="list-style-type: none"> • FTP Server • VNC client/server • PDF reader • Active X controls • Third-party device support Additional functionality is available by ordering terminals with optional extended features ⁽¹⁾ <ul style="list-style-type: none"> • Internet Explorer web browser • Remote desktop connection • Media player • File viewers for Microsoft Office Word, PowerPoint, and Excel • WordPad text editor 	None	None	None
Open or closed system	Open or closed desktop	Closed	Closed	Closed
Memory	512 MB nonvolatile flash/512 MB RAM	64 MB nonvolatile flash/64 MB RAM	64 MB nonvolatile flash/64 MB RAM	64 MB nonvolatile flash/64 MB RAM
External storage	Secure Digital (SD) card USB flash drives	CompactFlash	CompactFlash	USB flash: C200/C300 USB flash/SD card: C600/C1000
Power	AC or DC	AC or DC	DC	DC
Preferred controller	ControlLogix	CompactLogix	CompactLogix	MicroLogix, SLC, PowerFlex 4 drive, Micro800
Capabilities	<ul style="list-style-type: none"> • High memory capacity • desktop access enabled or disabled • backup and restore function • Multi-network/multivendor connectivity • Alarm messages (email alarms) • Recipes • Trending • Data logging 	<ul style="list-style-type: none"> • Multi-network/multivendor connectivity • Alarm messages • Recipes • Trending • Data logging 	<ul style="list-style-type: none"> • Single controller • 25 displays • 200 alarm messages • Recipes • Trending • Data logging 	<ul style="list-style-type: none"> • Single device • <20 displays • <100 alarm messages • Recipe upload/download • Trending • Data logging
Key differentiators	<ul style="list-style-type: none"> • Windows CE desktop access • Larger application size • Pre-engineered faceplates for motion, process, and drives • Native Logix addressing • Direct referencing of Logix tags • Modular hardware simplifies system integration and updates • FactoryTalk View Machine Edition comes installed and activated 	<ul style="list-style-type: none"> • Pre-engineered faceplates for motion, process, and drives • Native Logix addressing • Direct referencing of Logix tags • Modular hardware simplifies system integration and updates • FactoryTalk View Machine Edition comes installed and activated 	<ul style="list-style-type: none"> • Single controller for midrange applications • Pre-engineered faceplates for motion, process, and drives • Native Logix addressing • Direct referencing of Logix tags • FactoryTalk View Machine Edition comes installed and activated 	<ul style="list-style-type: none"> • Component-level device for small applications • No programming software required

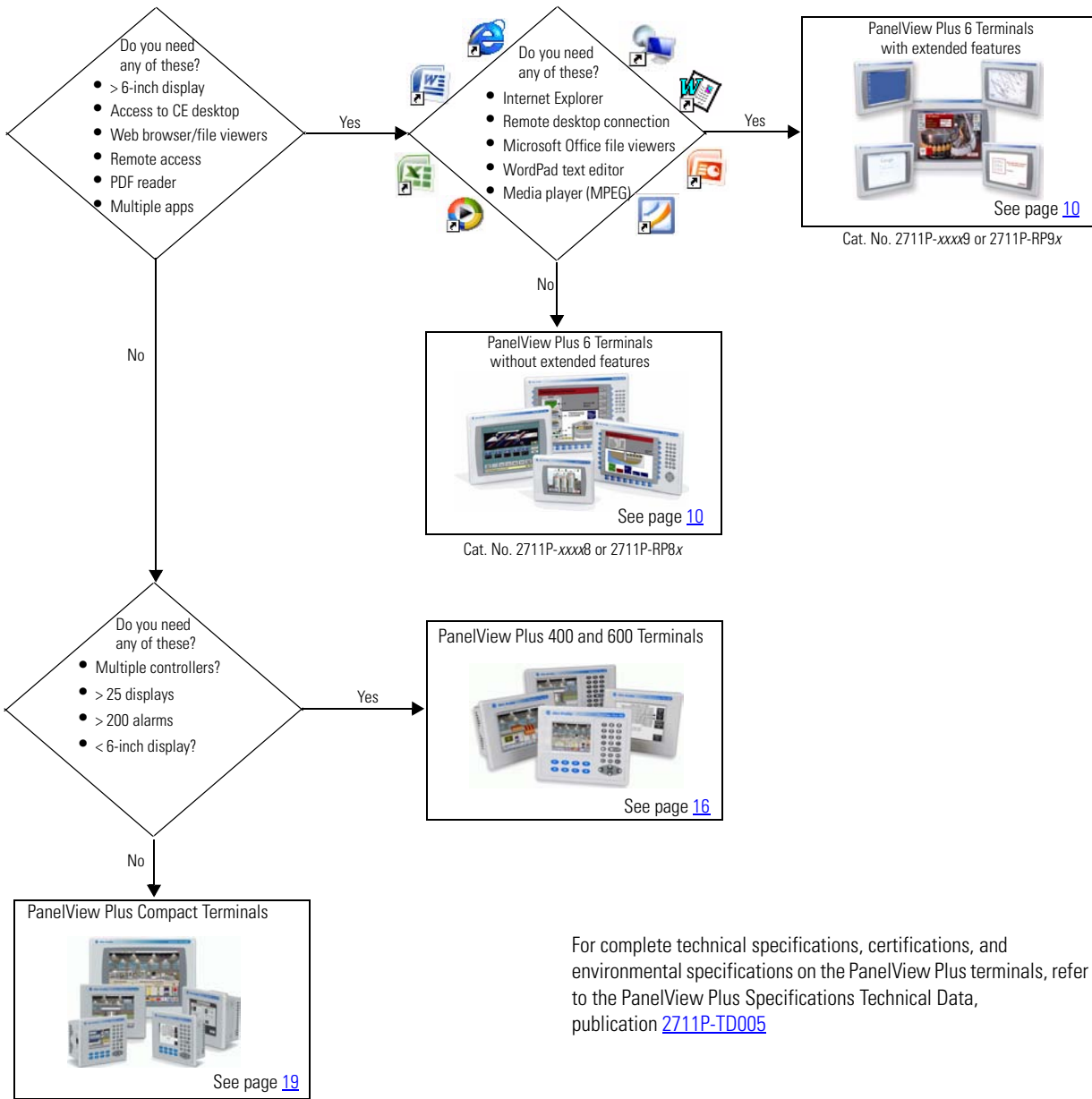
(1) Extended features are available by ordering catalog numbers ending in 9, for example, 2711P-Kxxx9, 2711P-Bxxx9, 2711P-Txxx9.

PanelView Plus Terminals

PanelView Plus devices give operators a clear view into monitoring and controlling applications. With FactoryTalk View Machine Edition already installed and activated, development time is reduced. The PanelView Plus family of products provides a broad range of rugged terminals that offer the following:

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

Figure 1 - Selecting a PanelView Plus Platform



For complete technical specifications, certifications, and environmental specifications on the PanelView Plus terminals, refer to the PanelView Plus Specifications Technical Data, publication [2711P-TD005](#)

Typical Configurations

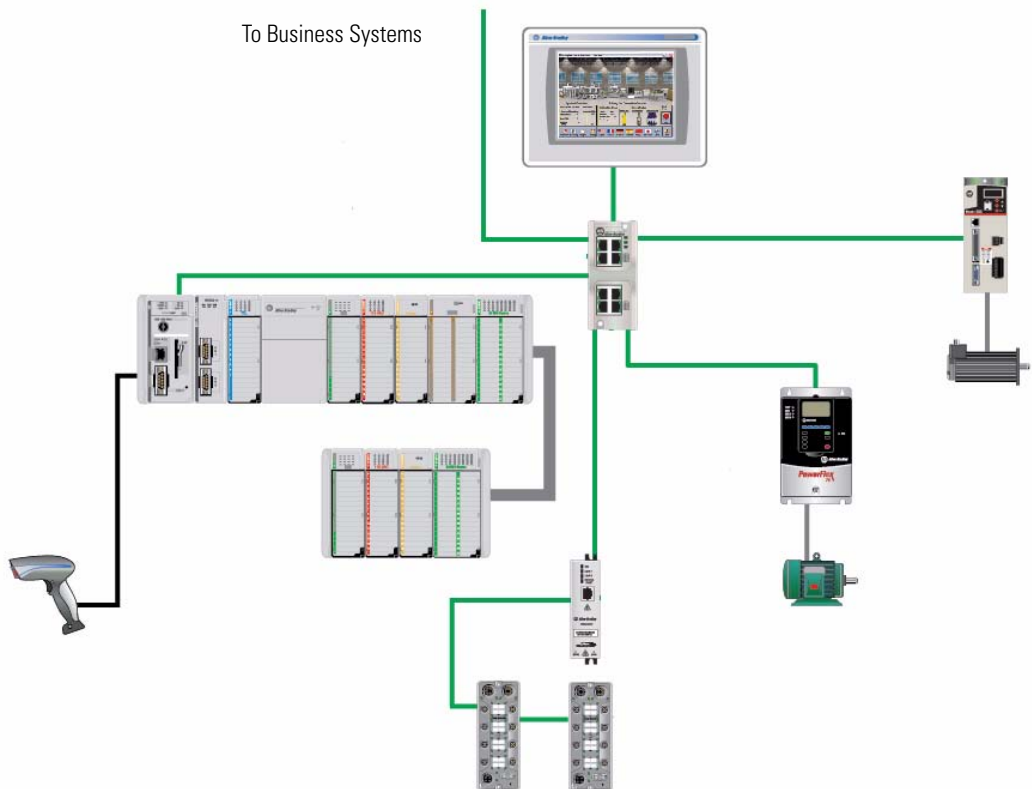
Figure 2 shows a configuration where a PanelView Plus terminal is used with a Logix controller in standalone or machine-level mode using serial connectivity.

Figure 2 - Standalone Machine



In Figure 3, a PanelView Plus Compact terminal and the 1769-L3x CompactLogix system provide an integrated solution for midsize applications. Typically, these applications are machine-level control applications that require smaller I/O quantities and more communication capabilities than serial connectivity.

Figure 3 - Midsize Application



PanelView Plus 6 Terminals



This platform use modular components with value-added options for flexible system configuration. These components are usable across the entire PanelView Plus 6 platform and install with minimal effort:

- Color display modules ranging from 6.5 to 15-inches in size with either key, touch screen, or combination key/touch-screen input
- Windows CE logic modules providing desktop access
- Optional communication modules for network communication

Configured terminals with a display module and logic module can be ordered as a single catalog number or as separate components for field installation.

A high-bright display for outdoor use, plus conformal-coated and marine-certified components, extend this platforms ability to operate in environments with even more stringent and varying requirements.

The core component of this platform is the high-performance logic module that runs a closed or open Windows CE desktop environment with optional, extended features and file viewers. System integrators and OEMs can configure and deploy systems that allow or restrict desktop access.

Table 2 - Logic Module Features

Features	Description
High memory capacity	512 MB nonvolatile flash and 512 MB RAM
Power input	AC or DC
Network interface	For optional 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 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	<p>All terminals run the Windows CE 6.0 operating system (OS) providing OS functionality 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 • PDF reader
FactoryTalk View software	<ul style="list-style-type: none"> • FactoryTalk View Machine Edition software, 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



Product Selections

Bulletin Number	Input Type	Display Size	Display Type	Communication	Power	Operating System	Special Option
2711P-	K = Keypad	7 = 6.5 in.	C = Color	4 = Ethernet, RS-232 & (2) USB	A = AC	8 = Windows CE 6.0 operating system	K = Conformal-coated
	T = Touch	10 = 10.4 in.			D = DC	9 = Windows CE 6.0 operating system with extended features	
	B = Keypad/Touch	12 = 12.1 in. 15 = 15 in.					

Table 3 - PanelView Plus 6 Terminals without Extended Features

Cat. No.			Display		Communication		Input Power	Memory RAM/Nonvolatile
Keypad	Touch	Keypad/Touch	Size	Type	RS-232	Ethernet		
700 Model								
2711P-K7C4D8	2711P-T7C4D8	2711P-B7C4D8	6.5-in.	Color	•	•	DC	512 MB/512 MB
–	2711P-T7C4D8K ⁽¹⁾	–			•	•	DC	512 MB/512 MB
2711P-K7C4A8	2711P-T7C4A8	2711P-B7C4A8			•	•	AC	512 MB/512 MB
1000 Model								
2711P-K10C4D8	2711P-T10C4D8	2711P-B10C4D8	10.4-in	Color	•	•	DC	512 MB/512 MB
2711P-K10C4A8	2711P-T10C4A8	2711P-B10C4A8			•	•	AC	512 MB/512 MB
1250 Model								
2711P-K12C4D8	2711P-T12C4D8	2711P-B12C4D8	12.1-in	Color	•	•	DC	512 MB/512 MB
–	2711P-T12C4D8K ⁽¹⁾	–			•	•	DC	512 MB/512 MB
2711P-K12C4A8	2711P-T12C4A8	2711P-B12C4A8			•	•	AC	512 MB/512 MB
1500 Model								
2711P-K15C4D8	2711P-T15C4D8	2711P-B15C4D8	15-in.	Color	•	•	DC	512 MB/512 MB
2711P-K15C4A8	2711P-T15C4A8	2711P-B15C4A8			•	•	AC	512 MB/512 MB

(1) Conformal-coated terminal.

Table 4 - PanelView Plus 6 Terminals with Extended Features

Cat. No.			Display		Communication		Input Power	Memory RAM/Nonvolatile
Keypad	Touch	Keypad/Touch	Size	Type	RS-232	Ethernet		
700 Model								
2711P-K7C4D9	2711P-T7C4D9	2711P-B7C4D9	6.5-in.	Color	•	•	DC	512 MB/512 MB
2711P-K7C4A9	2711P-T7C4A9	2711P-B7C4A9			•	•	AC	512 MB/512 MB
1000 Model								
2711P-K10C4D9	2711P-T10C4D9	2711P-B10C4D9	10.4-in	Color	•	•	DC	512 MB/512 MB
2711P-K10C4A9	2711P-T10C4A9	2711P-B10C4A9			•	•	AC	512 MB/512 MB
1250 Model								
2711P-K12C4D9	2711P-T12C4D9	2711P-B12C4D9	12.1-in	Color	•	•	DC	512 MB/512 MB
2711P-K12C4A9	2711P-T12C4A9	2711P-B12C4A9			•	•	AC	512 MB/512 MB
1500 Model								
2711P-K15C4D9	2711P-T15C4D9	2711P-B15C4D9	15-in.	Color	•	•	DC	512 MB/512 MB
2711P-K15C4A9	2711P-T15C4A9	2711P-B15C4A9			•	•	AC	512 MB/512 MB

Accessories

Tables 5...17 list accessories for the PanelView Plus 6 terminals. Display modules, logic modules, and communication modules can be ordered as separate components for field installation.

Table 5 - Display Modules

Cat. No.	Input Type	Display	Marine Certified	Conformal Coated	Built-in Antiglare Overlay
700 Model					
2711P-RDK7C	Keypad	7-in. color			
2711P-RDK7CK	Keypad			•	
2711P-RDT7C	Touch				
2711P-RDT7CK	Touch			•	
2711P-RDT7CM	Touch		•		
2711P-RDB7C	Keypad/Touch				
2711P-RDB7CK	Keypad/Touch			•	
2711P-RDB7CM	Keypad/Touch		•		
1000 Model					
2711P-RDK10C	Keypad	10.4-in. color			
2711P-RDT10C	Touch				
2711P-RDT10CM	Touch		•		
2711P-RDB10C	Keypad/Touch				
2711P-RDB10CM	Keypad/Touch		•		
1250 Model					
2711P-RDK12C	Keypad	12.1-in. color			
2711P-RDK12CK	Keypad			•	
2711P-RDT12C	Touch				
2711P-RDT12CK	Touch			•	
2711P-RDT12AG	Touch				•
2711P-RDT12H ⁽¹⁾	Touch				
2711P-RDB12C	Keypad/Touch				
2711P-RDB12CK	Keypad/Touch			•	
1500 Model					
2711P-RDK15C	Keypad	15-in. color			
2711P-RDT15C	Touch				
2711P-RDT15AG	Touch				•
2711P-RDB15C	Keypad/Touch				

(1) This catalog number is a high-bright display module, indicated by the H at end of cat. no., that is designed for outdoor applications. The high-bright display module can be used only with DC-powered logic modules.

Table 6 - Logic Modules

Cat. No.	Power Input	Memory RAM/Nonvolatile	Communication	Marine Certified	Conformal Coated	Included Software
Logic Modules without Extended Features						
2711P-RP8A	AC	512 MB/512 MB	<ul style="list-style-type: none"> Ethernet RS-232 Network interface for communication module 	•		<ul style="list-style-type: none"> Windows CE 6.0 operating system without extended features/file viewers FactoryTalk View Machine Edition runtime, version 6.0 or later FactoryTalk ViewPoint software, version 1.2 or later
2711P-RP8D	DC	512 MB/512 MB		•		
2711P-RP8DK	DC	512 MB/512 MB		•	•	
Logic Modules with Extended Features						
2711P-RP9A	AC	512 MB/512 MB	<ul style="list-style-type: none"> Ethernet RS-232 Network interface communication module 	•		<ul style="list-style-type: none"> Windows CE 6.0 operating system with extended features/file viewers FactoryTalk View Machine Edition runtime, version 6.0 or later FactoryTalk ViewPoint software, version 1.2 or later
2711P-RP9D	DC	512 MB/512 MB		•		
2711P-RP9DK	DC	512 MB/512 MB		•	•	

Table 7 - Communication Modules

Cat. No.	Communication			Conformal Coated	Marine Certified
	DH+	DH-485	ControlNet ⁽¹⁾		
2711P-RN6	•	•			
2711P-RN6K	•	•		•	
2711P-RN15S			•		•
2711P-RN15SK			•	•	

(1) Scheduled and unscheduled communication.

Table 8 - Secure Digital (SD) Cards

Cat. No.	Description
1784-SD1	1 GB Secure Digital (SD) card
1784-SD2	2 GB Secure Digital (SD) card
2711C-RCSD	USB to SD adapter for secure digital card (SD)

Table 9 - Programming Cable

Cat. No.	Description	Length
2711C-CBL-UU02	USB host to USB device programming cable	2 m (6.5 ft)

Table 10 - Function Key Legend Inserts

Cat. No.	PanelView Plus 6 Terminal Model ⁽¹⁾	Includes
2711P-RFK7	700 keypad	Blank legend inserts and software
2711P-RFK10	1000 keypad	
2711P-RFK12	1250 keypad	
22711P-RFK15	1500 keypad	

(1) Applies to keypad and keypad/touch-screen terminals.

Table 11 - Antiglare Overlays

Cat. No. ⁽¹⁾	PanelView Plus 6 Terminal Model	Operator Input		
		Keypad	Touch	Key/Touch
2711P-RGK7	700	•		•
2711P-RGT7			•	
2711P-RGK10	1000	•		•
2711P-RGT10			•	
2711P-RGK12	1250	•		•
2711P-RGT12			•	
2711P-RGK15	1500	•		•
2711P-RGT15			•	

(1) Three overlays are shipped with each catalog number.

Table 12 - Solar Visor

Cat. No.	Description
2711P-RVT12	Solar visor for 1250 high-bright display module, cat. no. 2711P-RDT12H

Table 13 - Mounting Hardware

Cat. No.	Description	Quantity
2711P-RTMC	Mounting clips	8

Table 14 - Battery Replacement

Cat. No.	Description	Quantity
2711P-RY2032	Replacement battery	1

Table 15 - Power Supply and Power Terminal Blocks

Cat. No.	Description	Quantity
2711P-RSACDIN	DIN-rail power supply, AC-to-DC, 85...265V AC, 47...63 Hz	1
2711P-RTBAC3	AC power terminal block	10
2711P-RTBDC2	2-pin DC power terminal block	10

Table 16 - Backlight Replacements

Cat. No.	PanelView Plus 6 Display Module Size	Series	Number of Backlights
2711P-RL7C	700	A and B	1
2711P-RL7C2		C and D	1
2711P-RL10C	1000	A	1
2711P-RL10C2		B and C	1
2711P-RL12C	1250	A and B	2
2711P-RL12C2		C	1
2711P-RL15C	1500	B	2

Table 17 - Bezel Replacements

Cat. No.	PanelView Plus 6 Terminal Model	Operator Input		
		Keypad	Touch	Key/Touch
2711P-RBK7	700	•		
2711P-RBT7			•	
2711P-RBB7				•
2711P-RBK10	1000	•		
2711P-RBT10			•	
2711P-RBB10				•
2711P-RBK12	1250	•		
2711P-RBT12			•	
2711P-RBT12H ⁽¹⁾			•	
2711P-RBB12				•
2711P-RBK15	1500	•		
2711P-RBT15			•	
2711P-RBB15				•

(1) Applies to the cat. no. 2711P-RDT12H 1250 high-bright display module.