

Industrial Panel PC with 15 in. LCD

NI PPC-2115 **NEW!**

- 1 GHz Intel Celeron M processor
- 40 GB hard drive and 512 MB RAM
- Fanless cooling for NI programmable automation controllers (PACs)
- 15 in. XGA TFT color LCD
- Thin 2.5 in. depth to save panel space
- Gigabit and fast Ethernet support

Mounting and Certification

- 0 to 50 °C operating range
- NEMA4/IP65-compliant front panel
- Panel-mount brackets included



Overview

The National Instruments PPC-2115 is a fanless industrial panel PC (PPC) with a built-in touch screen. The NI PPC-2115 offers a thin 2.5 in. display to save panel space and a 1 GHz Celeron M processor with a rugged 15 in. TFT color LCD display for large human machine interface (HMI) applications. Combine the NI LabVIEW Datalogging and Supervisory Control (DSC) Module with the PPC-2115 to deploy LabVIEW front panels.

Touch Screen and Display Specifications

The PPC-2115 offers a high-quality 15 in. thin film transistor (TFT) display with a touch screen. See Table 2 for key display and touch screen specifications.

	PPC-2115
Display	15 in. XGA TFT LCD
Contrast ratio	500:1
Luminance	350 cd/m ²
Maximum colors	262 k
LCD Maximum resolution	1024 x 768
Touch Screen resolution	1024 x 1024

Table 1. PPC-2015 and PPC-2115 Display Comparison

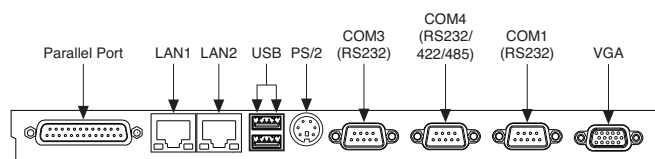


Figure 1. Bottom View of PPC-2115 Showing Connectivity Options

Rugged Industrial Design

The PPC-2115 offers fanless cooling over a 0 to 50 °C operating temperature range. The reduced depth of the PPC-2115 saves limited rack and panel space on the plant floor while providing 15 in. of touch screen control for large HMI applications. The PPC-2115 touch screen display features tempered antireflective glass that is coated to minimize scratching. NEMA4/IP65 compliance ensures that the unit meets hose-down requirements. The PPC-2115 features extended shock, vibration, and temperature ratings plus global safety standards and agency certifications.

Panel PC Connectivity Options

The PPC-2115 delivers a wide range of connectivity options as shown in Table 2. The locations for the different connectivity options are shown in Figure 1.

Connectivity	PPC-2015	PPC-2115	NI Hardware
PCI slots	2	–	M Series, S Series, R Series, E Series
Parallel ports	1	1	Printers
RS232/422/485	1/1	2/1	Compact FieldPoint and CompactRIO (RS232)
PCMCIA Type II	2	1	DAQCard-60xxE
Hi-Speed USB	5	2	NI CompactDAQ and USB DAQ
Ethernet 10/100	1	1	Compact FieldPoint, CompactRIO, PXI/CompactPCI
Gigabit Ethernet, 10/100/1000	–	1	Compact FieldPoint, CompactRIO, PXI/CompactPCI
PS/2	2	1	Mouse and keyboard
CompactFlash	–	1	Removable data-logging memory

Table 2. Connectivity Options for NI Panel PCs



Industrial Panel PC with 15 in. LCD

By using open industry standards such as PCI, USB, and Ethernet, the PPC-2115 and NI control hardware combined with LabVIEW graphical system design software provide the following:

- A single environment for HMI and logic
- A complete solution for machine control from a single vendor
- Tight integration of hardware and software system components
- Device- and enterprise-level connectivity

HMI for LabVIEW DSC

Use LabVIEW DSC to quickly create custom graphical user interfaces and deploy them to the 15 in. panel PC.



Figure 2. Panel PC with LabVIEW DSC

HMI and Panel PC Controller for NI CompactDAQ

Add up to two USB data acquisition devices to the PPC-2115 to create an industrial data acquisition application using LabVIEW and the National Instruments DAQ platform.



Figure 3. PPC-2115 Panel PC Offers Two USB Ports for Connectivity to NI USB Data Acquisition Hardware Including NI CompactDAQ

HMI with Industrial Distributed I/O

With LabVIEW and LabVIEW DSC, you can create a SCADA system using NI Compact FieldPoint distributed I/O and CompactRIO embedded control and data acquisition.

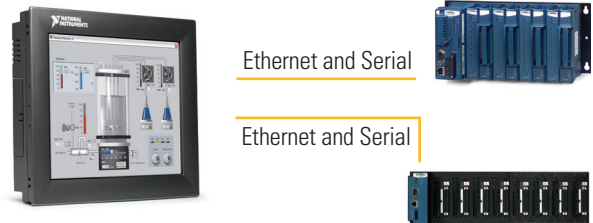


Figure 4. Panel PC Connects Using Ethernet to Compact FieldPoint and CompactRIO

Ordering Information

NI PPC-2115 with Windows XP779862-01

Accessories

NI LabVIEW DSC Module778311W-09

NI LabVIEW DSC, Run-Time778312W-03

BUY NOW!

For complete product specifications, pricing, and accessory information, call 800 813 3693 (U.S.) or go to ni.com/hmi.

BUY ONLINE at ni.com or CALL 800 813 3693 (U.S.)

Industrial Panel PC with 15 in. LCD

Specifications

System Hardware

Display.....	15 in. XGA TFT color LCD with touch screen
CPU	1 GHz Intel Celeron M
Memory	512 MB RAM
Storage.....	40 GB HDD

LCD

Maximum resolution.....	1024 x 768 (XGA)
Maximum colors	256,000
Pixel pitch (W x H, mm)	0.3075 x 0.3075
Viewing angle	120 deg
Luminance (cd/m ²)	350
Contrast ratio	500:1
Backlight.....	2 CCFL
Backlight lifetime.....	50,000 h

Connectivity

Parallel port.....	1
Serial ports.....	2 x RS232 (COM1 and COM3) and RS232/RS422/RS485 (COM4)
Ethernet.....	LAN1 (10/100BaseT) LAN2 (10/100/1000BaseT)
Mouse and keyboard	1 PS/2 port
USB	2 Hi-Speed USB ports
Removable storage	1 CompactFlash slot
PCMCIA	1 slot
Audio	3 audio ports: 1 microphone, 1 line in, and 1 line out

Touch Screen

Touch screen type	Resistive
Base glass construction.....	Tempered glass
Resolution	1024 x 1024
Light transmission.....	75% typical
Power rating.....	3.3 to 5 V
Durability.....	100 million touches

Power

Input voltage	18 to 32 VDC (the fuse becomes an open circuit if input exceeds 33 VDC)
Typical	24 VDC, 2.0 A

Environment

Operating temperature	0 to 50 °C (32 to 122 °F)
Storage temperature.....	-20 to 60 °C (-4 to 140 °F)
Humidity	40 °C @ 10 to 95% relative humidity (noncondensing)
Vibration.....	1 g _{rms} (5 to 500 Hz)
Maximum altitude.....	2,000 m
Pollution degree.....	2

Safety

This product is designed to meet the requirements of the following standards of safety for information technology equipment:

- IEC 60950-1, EN 60950-1
- UL 60950-1, CSA 60950-1

Note: For UL and other safety certifications, refer to the product label or visit ni.com/certification, search by model number or product line, and click the appropriate link in the Certification column.

Electromagnetic Compatibility

This product is designed to meet the requirements of the following standards of EMC for electrical equipment for measurement, control, and laboratory use:

- EN 55024, CISPR 24 EMC requirements
- EN 55022, CISPR 22 Emissions; Class A
- CE, C-Tick, ICES, and FCC Part 15 Emissions; Class A

Note: For EMC compliance, operate this device according to product documentation.

CE Compliance

This product meets the essential requirements of applicable European Directives, as amended for CE marking, as follows:

- 2006/95/EC; Low-Voltage Directive (safety)
- 2004/108/EEC; Electromagnetic Compatibility Directive (EMC)

Note: Refer to the Declaration of Conformity (DoC) for this product for any additional regulatory compliance information. To obtain the DoC for this product, visit ni.com/certification, search by model number or product line, and click the appropriate link in the Certification column.

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National Instruments is committed to designing and manufacturing products in an environmentally responsible manner. NI recognizes that eliminating certain hazardous substances from our products is beneficial not only to the environment but also to NI customers. For additional environmental information, refer to the NI and the Environment Web page at ni.com/environment. This page contains the environmental regulations and directives with which NI complies, as well as any other environmental information not included in this document.

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