



SMART OPS PC modules

with Windows® 11 Pro

User guide

PCM11-i5 (PCM11-1) | PCM11-i7v (PCM11-2) | PCM8-i5 (PCM8-1) | PCM8-i7v (PCM8-2)



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Learn more

This guide and other resources for SMART OPS PC modules are available in the Support section of the SMART website (smarttech.com/support). Scan this QR code to view these resources on your mobile device.

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This product and/or use thereof is covered by one or more of the following U.S. patents:

www.smarttech.com/patents

November 20, 2023

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Chapter 1 Welcome

SMART Open Pluggable Specification (OPS) PC modules provide a hassle-free Windows 11 Pro solution based on Intel Core™ processors and are designed specifically to work with SMART Board® interactive displays. All OPS PC modules are Windows Hardware Quality Labs (WHQL) certified and fully licensed with Windows 11 Pro out of the box. Install the OPS PC module in a SMART Board interactive display's OPS slot to provide a complete 4K UHD Windows 11 installation at your fingertips, without the need for an external device or additional cables.

Install familiar Windows software applications, such as SMART Notebook® collaborative learning software, SMART TeamWorks™ visual collaboration software, and SMART Meeting Pro® software, and access the internet directly through your existing interactive display's network connection. Upgrades and service for the OPS PC module are easy to perform without removing the interactive display from its mounting.

Note

OPS PC modules are available with customizable memory (RAM) and storage (SSD) on extended lead times with minimum order quantity. Please contact your local sales representative for details.



Features

Key features of SMART OPS PC modules include:

Windows Autopilot enabled Easily set up new devices, save time, and deliver a standardized user experience. For added convenience, use the PKID printed on each unit.

See > [Overview of Windows Autopilot](#)

Integrated Wi-Fi hotspot Easily and securely connect up to eight devices with the OPS PC module's mobile hotspot. Share direct access to a Wi-Fi, Ethernet, or cellular data connection using the Windows local hotspot.

See > [Use your Windows PC as a mobile hotspot](#)

Simplified peripheral connections Access UVC devices connected to the interactive display, such as webcams and keyboards, directly through the OPS PC module.

See > [USB Video Class \(UVC\) camera implementation guide](#)

Chapter 2 Installing and using the SMART OPS PC module

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You or your organization’s installers can install the SMART OPS PC module in a supported SMART Board interactive display’s accessory slot following the OPS PC module’s installation instructions:

Series	Installation instructions
PCM11	docs.smarttech.com/kb/171775
PCM8	docs.smarttech.com/kb/171544

You can then view the OPS PC module’s input on the display.

Caution

Do not install or remove the OPS PC module while the display is turned on. Ensure the power switch on the back of the display beside the AC power inlet is in the OFF (O) position.

Note

For a list of SMART Board interactive displays in which you can install the OPS PC module, see the OPS PC module’s specifications.

Series	Specifications
PCM11	docs.smarttech.com/kb/171761
PCM8	docs.smarttech.com/kb/171429

Tip

You can install the SMART software that is included with the display on the OPS PC module. For more information about installing software, see the software’s installation documentation.

Viewing the OPS PC module input source

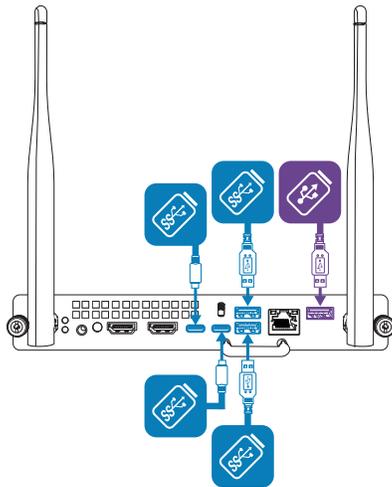
1. Open the display's input source menu:

Display series	iQ status	Procedure
GX	N/A	Open the Side Toolbar menu by tapping and sliding either of the Side Toolbar menu handles  (located on either side of the screen) towards the center of the screen, and then tap the Input Source icon  . OR Press the Input Source button  on the remote control.
MX100	N/A	Press the Input button  on the front control panel or the remote control.
MX (V2, V2-C, and V3) MX Pro (V2, V2-C, and V3)	Enabled or disabled	Press the Input button  on the front control panel or the remote control.
MX (V4 and later) MX Pro (V4 and later)	Enabled	Press the Home button  below the screen, and then tap Input  . OR Press the Input button  on the remote control.
MX (V4 and later) MX Pro (V4 and later)	Disabled	Press the Home button  below the screen. OR Press the Home button  or the Input button  on the remote control. Tip If you want the OPS PC module's input source to appear whenever you wake up the display, tap the star in the upper-left corner of the OPS PC module's thumbnail.
QX Pro 6000S 6000S Pro 7000R 7000R Pro	Enabled	Tap the Home button  below the screen, and then tap Input  . OR Press the Input button  on the remote control.
QX Pro 6000S 6000S Pro 7000R 7000R Pro	Disabled	Tap the Home button  below the screen. OR Press the Home button  or the Input button  on the remote control. Tip If you want the OPS PC module's input source to appear whenever you wake up the display, tap the star in the upper-left corner of the OPS PC module's thumbnail.
7000-V2 7000-V2 Pro	Enabled or disabled	Tap the Home button  at the bottom of the screen, and then tap Input  .

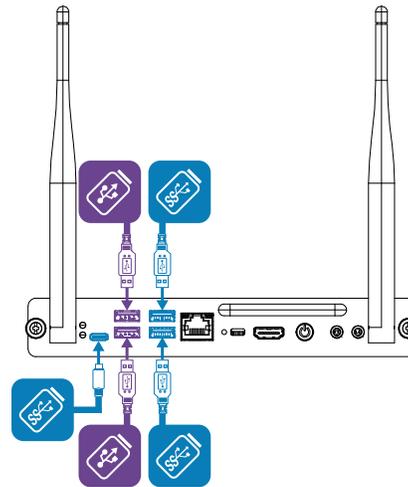
2. Select the OPS PC module input source.

Connecting USB drives, peripherals, and other devices

You can use USB drives, peripherals, and other devices with the OPS PC module by connecting those devices to the OPS PC module's USB 2.0 Type-A, USB 3.0 Type-A, and USB Type-C receptacles.



PCM11 series



PCM8 series

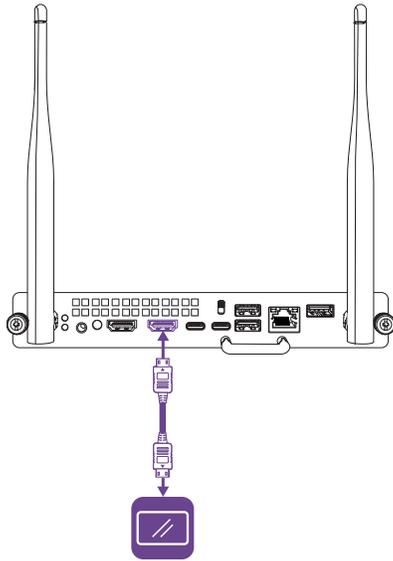
Alternatively, you can connect USB devices to the USB receptacles on the display. For information about the type and location of USB receptacles on the display, see the display's documentation.

Note

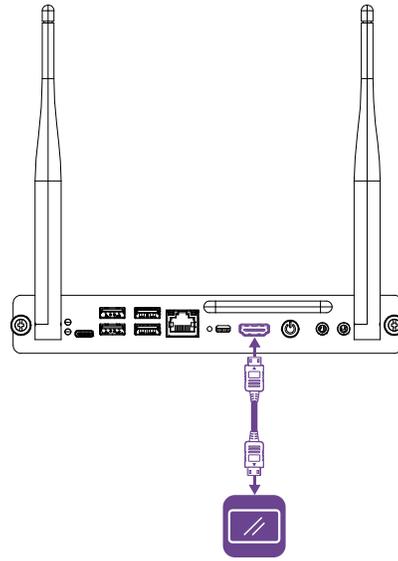
Charge a maximum of five devices (PCM11 series) or two devices (PCM8 series) at a time using USB receptacles.

Connecting external displays

You can connect an external display to the HDMI out connector on the OPS PC module (rather than the HDMI out connector on the display). This allows you to duplicate or extend the OPS PC module's desktop to the external display.

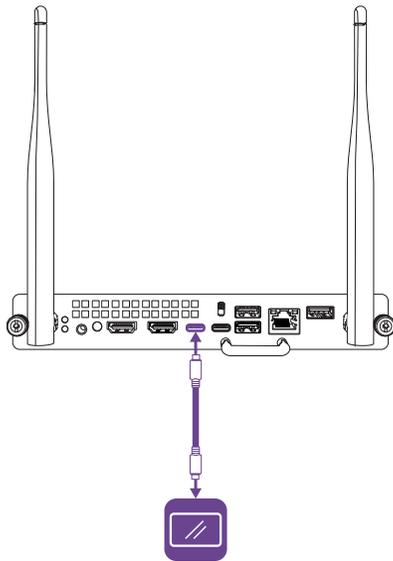


PCM11 series (HDMI 2.0 out)

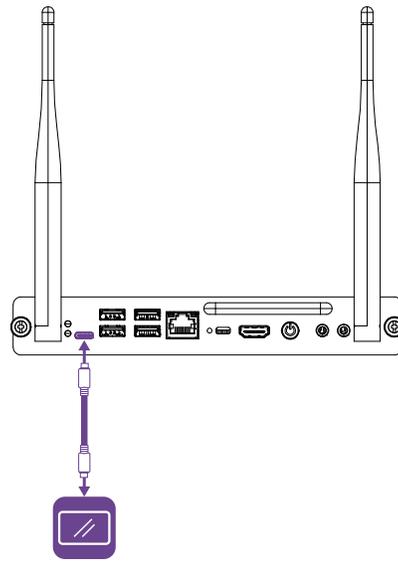


PCM8 series (HDMI 1.4 out)

Alternatively, you can connect an external display to one of the OPS PC module's USB Type-C receptacles.



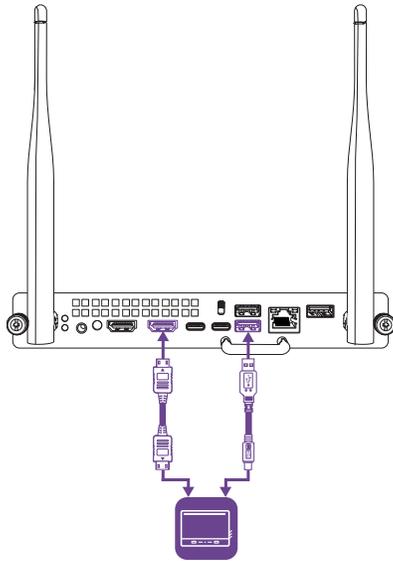
PCM11 series



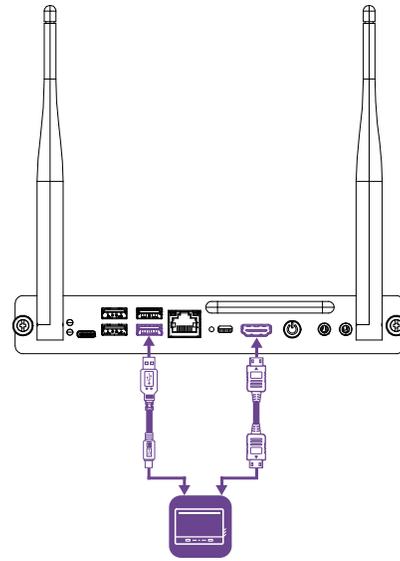
PCM8 series

Connecting the OPS PC module to a second SMART Board interactive display

You can connect an OPS PC module installed in one SMART Board interactive display to a second interactive display by connecting an HDMI cable from the module's HDMI out connector to one of the second interactive display's HDMI in connectors and a USB cable from one of the module's USB Type-A receptacles to the appropriate USB Type-B receptacle on the second interactive display.

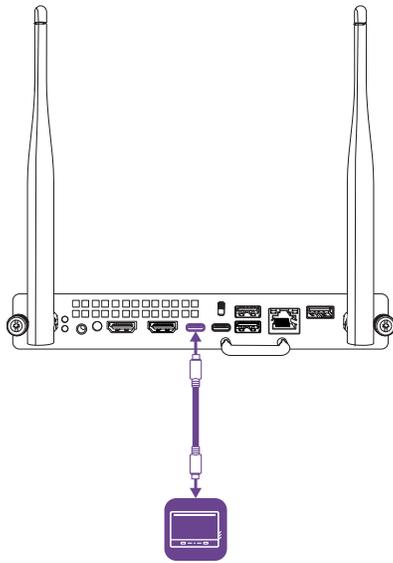


PCM11 series

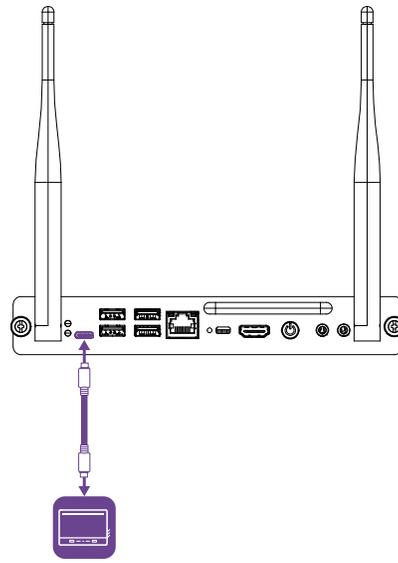


PCM8 series

Alternatively, if the second interactive display has a USB Type-C input, you can connect a USB cable from one of the module's USB Type-C receptacles to one of the second interactive display's USB Type-C receptacles.



PCM11 series



PCM8 series

Note

To view the OPC PC module's input on the second interactive display, you need to switch to the input source you connected the module to on that interactive display (for example, HDMI 1 or USB Type-C 1).

Chapter 3 **Troubleshooting**

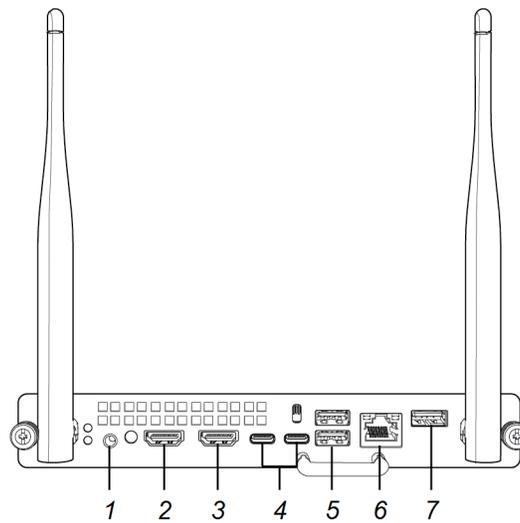
See [Troubleshooting](#) for information on how to resolve a variety of common problems with the SMART OPS PC module.

Appendix A Connectors

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PCM11 series

The following diagram and table present the connectors on the PCM11 series of SMART OPS PC modules:

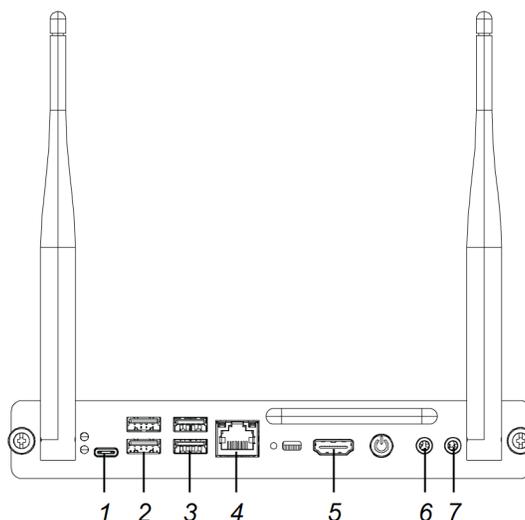


No.	Connector	Connects to	Notes
1	Stereo 3.5 mm	Headphones or headsets	[N/A]
2	HDMI in	External video source	[N/A]
3	HDMI out	External display	See > <i>Connecting external displays</i> on page 9
4	USB Type-C (x2)	Supported USB drives, peripherals, and other devices	See > <i>Connecting USB drives, peripherals, and other devices</i> on page 8

No.	Connector	Connects to	Notes
5	USB 3.0 Type-A (×2)	Supported USB drives, peripherals, and other devices	See > <i>Connecting USB drives, peripherals, and other devices</i> on page 8
6	RJ45	[N/A]	The OPS PC module uses the SMART Board interactive display's network connection (if available), so you typically don't need to connect the OPS PC module directly to a network.
7	USB 2.0 Type-A	Supported USB drives, peripherals, and other devices	See > <i>Connecting USB drives, peripherals, and other devices</i> on page 8

PCM8 series

The following diagram and table present the connectors on the PCM8 series of SMART OPS PC modules:



No.	Connector	Connects to	Notes
1	USB Type-C	Supported USB drives, peripherals, and other devices	See > <i>Connecting USB drives, peripherals, and other devices</i> on page 8
2	USB 2.0 Type-A (×2)	Supported USB drives, peripherals, and other devices	See > <i>Connecting USB drives, peripherals, and other devices</i> on page 8

No.	Connector	Connects to	Notes
3	USB 3.0 Type-A (×2)	Supported USB drives, peripherals, and other devices	See > <i>Connecting USB drives, peripherals, and other devices</i> on page 8
4	RJ45	[N/A]	The OPS PC module uses the SMART Board interactive display's network connection (if available), so you typically don't need to connect the OPS PC module directly to a network.
5	HDMI out	External display	See > <i>Connecting external displays</i> on page 9
6	Stereo 3.5 mm out	External speakers or headphones	[N/A]
7	Stereo 3.5 mm in	Microphone	[N/A]

Certification and compliance

Federal Communication Commission interference statement

FCC

Suppliers Declaration of Conformity

Unique Identifier: PCM8-1, PCM8-2, PCM11-1, PCM11-2

Responsible Party – US Contact Information

SMART Technologies Inc.

2401 4th Ave., 3rd Floor

Seattle, WA 98121

compliance@smarttech.com

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Note

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense

⚠ Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Restriction

Operations in the 5.15-5.25GHz band are restricted to indoor usage only.

IEEE 802.11b or 802.11g operation of this product in the USA is firmware limited to channels 1 through 13.

Radiation exposure statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the antenna of this device and all nearby persons. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter

EU Declaration of Conformity

Hereby SMART Technologies ULC declares that the OPS PCM8 and PCM11 are in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: smarttech.com/compliance.

⚠ Warning

Operation of this equipment in a residential environment this equipment may could cause radio interference.

The frequency band and the maximum transmitted power in the EU are listed below:

Transmitting Band (MHz)	Maximum Transmit Power (conducted dBm)
2402-2483.5	21
5150-5350	21
5470-5725	21
5475-5875	21

Restrictions in:

AT/BE/BG/CZ/DK/EE/FR/DE/IS/IE/IT/EL/ES/CY/LV/LI/LT/LU/HU/MTNL/NO/PL/PT/RO/SI/SK/TR/FI/SE/CH/UK/HR – 5150MHz-5350MHz is for indoor use only.

Microsoft® statement regarding Windows® 11 operating system

Windows 11 is automatically updated, which is always enabled. ISP fees may apply. Additional requirements may apply over time for updates.

Innovation, Science and Economic Development Canada statement

This device complies with RSS-247 of the Innovation, Science and Economic Development Canada Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

⚠ Caution

- (i) the device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
- (ii) the maximum antenna gain permitted for devices in the bands 5250–5350 MHz and 5470–5725 MHz shall comply with the e.i.r.p. limit; and
- (iii) the maximum antenna gain permitted for devices in the band 5725–5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.
- (iv) Users should also be advised that high-power radars are allocated as primary users (i.e., priority users) of the bands 5250–5350 MHz and 5650–5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Radiation exposure statement

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the antenna of this device and all nearby persons. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

Innovation, Science et Développement économique Déclaration du Canada

Cet appareil est conforme à la norme ISED CNR-247 pour les appareils radio agréés. Son fonctionnement est soumis aux deux conditions suivantes:

1. Le dispositif ne doit pas produire de brouillage préjudiciable, et
2. Ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable

⚠ Avertissement

- (i) les dispositifs fonctionnant dans la bande 5 150–5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
- (ii) le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5 250–5 350 MHz et 5 470–5 725 MHz doit se conformer à la limite de p.i.r.e.;
- (iii) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5 725–5 825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.
- (iv) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5 250–5 350 MHz et 5 650–5 850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Déclaration d'exposition aux radiations

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps. Cet émetteur ne doit pas être co-implantés ou exploités conjointement avec une autre antenne ou émetteur.

United Arab Emirates – Telecommunications and Digital Government Regulatory Authority (TDRA)



Equipment Name: Intel® Wi-Fi 6 AX200
Model: AX200NGW



Equipment Name: Intel Wi-Fi 6 AX201
Model: AX201NGW

Certification and compliance

Hardware environmental compliance

SMART Technologies supports global efforts to ensure that electronic equipment is manufactured, sold, and disposed of in a safe and environmentally friendly manner.

Waste Electrical and Electronic Equipment (WEEE)

Electrical and electronic equipment and batteries contain substances that can be harmful to the environment and to human health. The crossed-out wheeled bin symbol indicates that products should be disposed of in the appropriate recycling stream and not as regular waste.



Batteries

The OPS PC module contains a CR2032 coin cell battery. Recycle or dispose of batteries properly.

Perchlorate material

Battery contains perchlorate material. Special handling may apply. See dtsc.ca.gov/hazardouswaste/perchlorate.

More information

See smarttech.com/compliance for more information.

SMART Technologies

smarttech.com/support

smarttech.com/contactsupport

docs.smarttech.com/kb/171747