



SMART OPS PC modules

with Windows® 10 Pro

User guide

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



Was this document helpful?
smarttech.com/docfeedback/171747

SMART®



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.

Licenses



The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

The Bluetooth word mark is owned by the Bluetooth SIG, Inc. and any use of such marks by SMART Technologies ULC is under license.

Trademark notice

SMART Board, SMART Notebook, SMART TeamWorks, SMART Meeting Pro, smarttech, the SMART logo and all SMART taglines are trademarks or registered trademarks of SMART Technologies ULC in the U.S. and/or other countries. Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Intel and Core are trademarks of Intel Corporation in the U.S. and/or other countries. All other third-party product and company names may be trademarks of their respective owners.

Copyright notice

© 2021–2022 SMART Technologies ULC. All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system or translated into any language in any form by any means without the prior written consent of SMART Technologies ULC. Information in this manual is subject to change without notice and does not represent a commitment on the part of SMART.

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

www.smarttech.com/patents

May 17, 2022

Contents

- Contents 3**
- Chapter 2 Installing and using the SMART OPS PC module 5**
 - Viewing the OPS PC module input source 6
 - Connecting USB drives, peripherals, and other devices 7
 - Connecting external displays 8
- Chapter 3 Troubleshooting 9**
- Appendix A Connectors10**
 - PCM11 series10
 - PCM8 series 12
- Certification and compliance 14**

Chapter 1 Welcome

SMART Open Pluggable Specification (OPS) PC modules provide a hassle-free Windows 10 Pro solution¹ 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 10 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 10 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.



¹Windows 11 ready

Chapter 2 Installing and using the SMART OPS PC module

Viewing the OPS PC module input source	6
Connecting USB drives, peripherals, and other devices	7
Connecting external displays	8

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	smarttech.com/kb/171775
PCM8	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	smarttech.com/kb/171761
PCM8	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

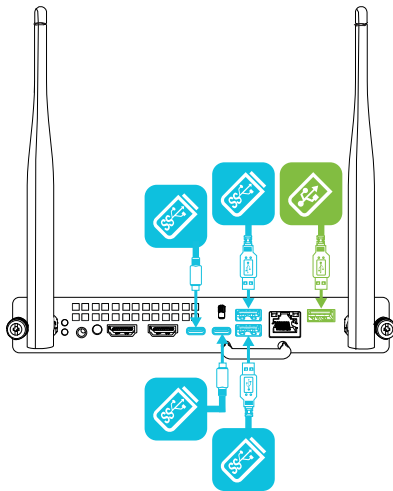
1. Open the display's input source menu:

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 and later) MX (V2 and later) Pro	Enabled or disabled	Press the Input button  on the front control panel or the remote control.
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.
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  .

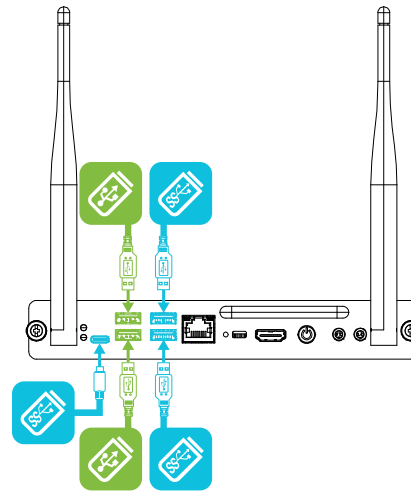
2. Select the OPS PC module input source.

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

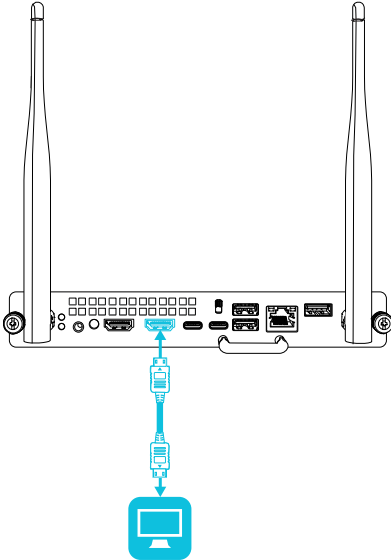
Alternatively, you can connect USB devices to the USB receptacles on the display. For information about the type and location of USB receptacles on the display, see the display's documentation.

Note

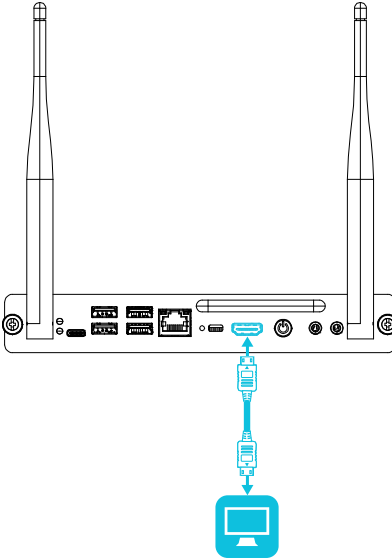
Charge a maximum of five devices (PCM11 series) or two devices (PCM8 series) at a time using USB receptacles.

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)

Chapter 3 Troubleshooting

This chapter explains how to resolve common issues with the SMART OPS PC module. If the symptoms you're encountering aren't covered below or the solutions to the symptoms don't work, refer to the SMART knowledge base (community.smarttech.com) for additional troubleshooting information.

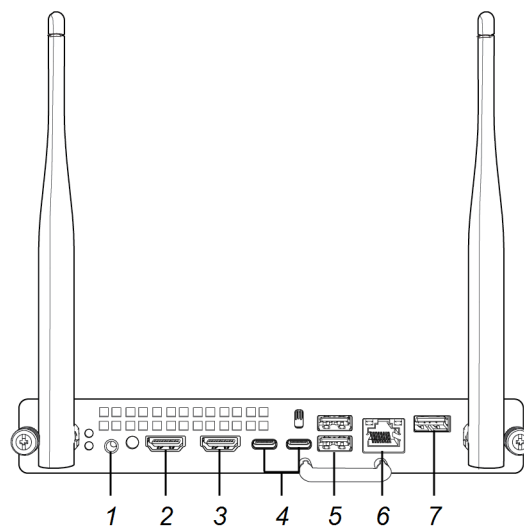
Symptom	Troubleshooting steps
The on-screen keyboard isn't visible.	<ul style="list-style-type: none">• Enable the on-screen keyboard:<ol style="list-style-type: none">a. Select Start > Settings. The <i>Settings</i> window appears.b. Tap Ease of Access, and then tap Keyboard.c. Enable Use the On-Screen Keyboard.For more information, see Use the On-Screen Keyboard (OSK) to type.• Enable tablet mode:<p>Tap the notification icon  in the bottom-right corner of the screen and then select Tablet mode.</p>For more information, see Turn tablet mode on or off.
Windows 10 or the OPS PC module isn't responding.	<ul style="list-style-type: none">• Restart the OPS PC module:<ol style="list-style-type: none">a. Press and hold the power button on the OPS PC module.b. Wait two minutes.c. Press the power button to turn on the OPS PC module.• If restarting the OPS PC module doesn't resolve the issue, contact SMART support.
There is an issue with Bluetooth.	See Fix Bluetooth problems in Windows 10: FAQ .
There is an issue with the network connection.	See Fix network connection issues in Windows .

Appendix A Connectors

PCM11 series	10
PCM8 series	12

PCM11 series

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

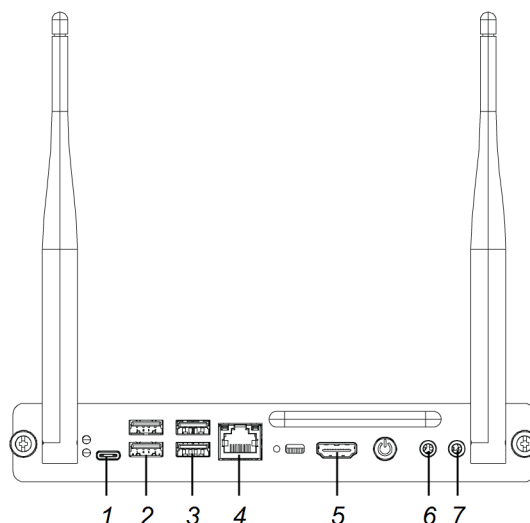


No.	Connector	Connects to	Notes
1	Stereo 3.5 mm	Headphones or headsets	See Analog audio cables and connectors .
2	HDMI in	External video source	See HDMI cables and connectors .
3	HDMI out	External display	See Connecting external displays on page 8 and HDMI cables and connectors .

No.	Connector	Connects to	Notes
4	USB Type-C (×2)	Supported USB drives, peripherals, and other devices	See <i>Connecting USB drives, peripherals, and other devices</i> on page 7 and <u>USB cables and connectors</u> .
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 7 and <u>USB cables and connectors</u> .
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 7 and <u>USB cables and connectors</u> .

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 7 and USB cables and connectors .
2	USB 2.0 Type-A (x2)	Supported USB drives, peripherals, and other devices	See <i>Connecting USB drives, peripherals, and other devices</i> on page 7 and USB cables and connectors .
3	USB 3.0 Type-A (x2)	Supported USB drives, peripherals, and other devices	See <i>Connecting USB drives, peripherals, and other devices</i> on page 7 and USB cables and connectors .
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 8 and HDMI cables and connectors .

No.	Connector	Connects to	Notes
6	Stereo 3.5 mm out	External speakers or headphones	See Analog audio cables and connectors .
7	Stereo 3.5 mm in	Microphone	See Analog audio cables and connectors .

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® 10 operating system

Windows 10 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

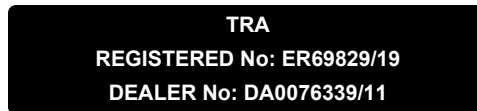
⚠ Avertissement

- (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

smarttech.com/kb/171747