

Mersive Solstice Pod

Scenario

Professors Benson, Smith, and Nielsen teach a biology course where students use mobile devices, mapping, and web technology to discover, research and present about the different species of trees present on their university campus. The project requires the students to produce a comprehensive web page describing their tree, complete with photographs, video and text, which students often produce on their mobile devices.

In order to promote group work, collaboration and peer critique in the classroom, it is important that students are able to share their materials from their mobile devices. To this end, the instructors requested to teach in an active learning classroom featuring 6 monitors that students can work around in groups. Each monitor is connected to a *Solstice Pod* from the company Mersive which allows students to connect from their PC or Mac laptops or Android or Apple iOS mobile devices. It was important for them that all major platforms were supported so that students' individual choices of technology did not become a hindrance to participation.

Connecting their mobile devices to the *Solstice Pod* allows students to share photos, video and text documents simply by mirroring their screens to the group monitor.

As the *Solstice Pod* allows for several devices to display content at the same time, students can easily compare and contrast their materials as well as edit their writing based on peer feedback.

Altogether, the instructors have noticed that the ease with which students can share their materials allows them to learn more from each other and ultimately produce better quality coursework.

1. What is it?

A wireless content sharing device that allows users to share content from Mac and PC laptops, Windows 8 tablets, and Android and iOS devices.



Figure 1: *Solstice Pod* front view(Photo credit: Mersive)

2. How does it work?

The *Solstice Pod* is a small 3.5" W x 3.5" D x 3/4" H box. It contains a processor and Android operating system with a custom user interface. Users install the Solstice app on their device to connect to the *Solstice Pod* and transmit their screens.

3. What are the key features?

During limited testing, the *Solstice Pod* proved very reliable. The user interface is simple and well laid out. From Windows and Mac laptops users can share their screens, including online video with audio. A single application window can also be shared and locally stored images and videos can be transmitted through a specific application interface. Video clips transferred this way played well during testing with working audio. Users of mobile devices running Android (5.0 and newer) and iOS (6 or newer) devices can share images and videos through the Solstice App interface and may also mirror their screens. iOS 6 or newer devices may also connect via the AirPlay protocol, as long as the Solstice app is running and connected to the display.

Documents or presentation slides are displayed via screen mirroring or via the Webview feature (for older devices), which requires the documents to be stored online such as in Dropbox or Google Drive. All content from the different platforms displays in good quality with minimal lag (subject to network performance).

No user data is retained on the *Solstice Pod*, which may be desirable from a security standpoint. Wireless access can be controlled by setting a randomly cycled PIN code or a user-selected permanent code. In addition, a Moderator mode allows one or more users with a pre-defined password to control what

is shared on screen by other users in Guest mode. Several users may transmit their screens to the *Solstice Pod* simultaneously, limited only by network bandwidth. The browser look-in function allows users to view what the *Solstice Pod* is sending to the screen through their browser. This feature is valuable for anyone who does not have a clear view of the screen. A mouse and keyboard may be connected directly to the *Solstice Pod* for local control and setup. Power comes from the included external power supply.

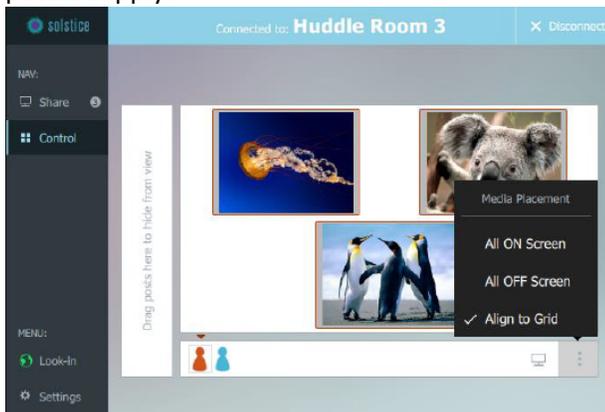


Figure 2: *Solstice Pod* display layout with two users sharing three images (Photo credit: Mersive)

4. What are the potential uses on the ISU campus?

- Conference rooms
- Classrooms
- Collaborative spaces



Figure 3: *Solstice Pod* connection interface (Photo credit: Mersive)

5. What are the implications for teaching and learning?

The *Solstice Pod* will allow some distinct pedagogical opportunities in the classroom but will require the instructor to learn how to use it and to use appropriate methodologies and pedagogies. One key advantage is the equal access from Android and iOS

devices and Mac and PC laptops, making it compatible with the vast majority of student mobile devices and computers. As mobile devices become increasingly capable, students are likely to do more of their learning and presenting from a mobile device or from an online document repository. The *Solstice Pod* supports all of these.

6. What are the downsides?

Online video does not mirror from Android devices. Devices for which there are no compatible *Solstice* apps, such as BlackBerry and Windows Phone, cannot transmit to the *Solstice Pod*. The iOS native video formats used by iOS device cameras cannot be displayed by the *Solstice Pod*.

One product or solution is rarely the best for all possible use scenarios and not all scenarios have been tested in this limited review. IT Services continues to review the broad adoptability for campus for this type of technology and other similar products exist. If you are interested in using this type of technology, please contact us so that we may help you review the available options and ensure that any product you choose will work with the IT infrastructure.

7. What are the key technical specs?

- One RJ-45 Ethernet port
- Dual band 802.11ac 2x2 Wireless
- 1 USB 3.0 port
- HDMI 1.4 out
- 2 GB RAM, 16 GB Flash Storage
- HD Streaming video support (1920 x 1080)
- Bluetooth 4.1 + HS
- Android 5.1 operating system
- External power supply, DV 5V, 2.5Amps
- Compatible with wired and wireless USB keyboards and mice.

8. Where can I find out more?

Visit the *Solstice Pod* product page

<https://www.mersive.com/product/the-solstice-pod/>

Read the [User Guide](#).

Read the [Data Sheet](#).

You may also contact Jacob E. Larsen

(jlarsen@iastate.edu) in IT Services to discuss how the *Solstice Pod* can be used with your students.

Additional [legal information](#).