

Reason

Sentinel GIS mobile software is built on Esri ArcPad. ArcPad is compatible with a wide variety of devices running Windows Mobile or Windows 7/8/10. However, Sentinel is not automatically compatible with every device that runs ArcPad.

Just because ArcPad will install on a device does not mean it will be a good platform for field data collection with Sentinel GIS. Factors such as screen size, processor speed, available memory (RAM), screen visibility, battery life, and connectivity (Wi-Fi, GPS, USB, SD/micro-SD, and COM ports) all have to be taken into consideration.

If you have a large coverage area, complex maps with many map layers, or want to use aerial photos in the field, you will want to choose a device with enough available memory to run the program effectively. In many cases, that means a Windows tablet rather than a Windows Mobile device. The Windows Mobile OS only allows a program to use a maximum of 32MB of memory. That means that ArcPad can run out of memory, leading to program freeze, lockup, display issues, and the like. On the other hand, ArcPad on a Windows tablet can make use of all available system memory, often 2GB-8GB or more of RAM even on an average device.

Sentinel Adulciding users need to have a 9-pin serial connector available to plug in the cable from the sprayer. Some devices have a 9-pin serial connector built in, but many do not.

All Sentinel mobile software requires GPS connectivity, so the mobile device should have GPS built in.

Using serial adapters, Bluetooth adapters, USB or Bluetooth GPS or other 3rd-party peripherals is NOT recommended. Each additional physical connection, configuration step, or software driver introduces complexity that makes the system more fragile, harder to troubleshoot, and more difficult to support. This recommendation is based on our company's 27 years of experience with hundreds of different field devices from companies like Trimble, Juniper Systems, and others. Take it from us: *Don't let a \$15 adapter bring your operations to a standstill!*

Frontier Precision sells and supports a variety of hardware from manufacturers such as Trimble, Juniper Systems, and Mobile Demand. In addition, Frontier supports a variety of other hardware that customers use after receiving this hardware from them for thorough testing.

The following list details the devices that Frontier approves for use with Sentinel GIS. Please be aware that **no support will be available for any device that is not expressly listed here**. If you wish to have your device listed, please contact us and have it sent in for testing.

Solution

Mobile devices are listed as **Tier 1 Preferred** or **Tier 2 Supported**. Tier 1 Preferred devices are those that Frontier sells and supports, and for which Frontier or its partners have warranty service, repair services, and accessories available. Manufacturers have long-term support plans (3-10 years) for these devices to ensure their continued usefulness for many years to come. Tier 2 Supported devices are those that are sold by 3rd party suppliers that have been sent in for testing. No warranty or repair services are available from Frontier for these devices. If these are consumer devices, accessories and replacement parts may not be available for long, and makes and models may change frequently. On the other hand, protection plans from SquareTrade, Asurion, and others may provide extended warranty and damage protection.

The following tables list approved devices, the Operating System, Processor, Memory, whether GPS is included, and whether they can be used with Larviciding, Surveillance, Service Request (SR), and Adulticiding (Ad), as well as additional notes. Devices that can be used with Adulticiding have a 9-pin RS-232 COM port built in.

Tier 1 Preferred Devices

| Name | OS | Processor | Memory | GPS | Larv, Surv, SR | Ad | Notes |
|----------------------|--|--|--------|-----|----------------|------|---|
| Juniper Mesa 2 | Windows 10 | Quad-core Intel® Atom™ Z3745 | 4 GB | Yes | Yes | Yes* | *A built-in 9-pin RS-232 serial port is optional at time of order |
| Mobile Demand T7200 | Windows 7 | Intel Atom dual core 1.6 or 1.8 GHz | 2 GB | Yes | Yes | Yes | Numeric keypad built in |
| Mobile Demand T1550 | Windows 10 | Intel® Quad-Core Z3735F | 2 GB | Yes | Yes | No | GPS on COM1, NMEA, 9600 |
| Mobile Demand T1400 | Windows 7 or 8.1 | Intel Celeron Bay Trail Quad Core 1.86 GHz | 4 GB | Yes | Yes | Yes | Discontinued; serial adapter cable required for COM1 |
| Trimble Juno 3B | Windows Embedded Handheld 6.5 Professional | 800 MHz | 256 MB | Yes | Yes | No | Discontinued, limited repair options, user-replaceable battery |
| Trimble Nomad 1050 G | Windows Mobile 6.5 Professional | 1.0 GHz, TI DM3730 | 512 MB | Yes | Yes | Yes | |
| Juniper Mesa | Windows Embedded Handheld 6.5 Professional | 806 MHz PXA320 | 256 MB | Yes | Yes | Yes | |

For complete information on the devices listed here, please see www.frontierprecision.com.

Tier 2 Supported Devices

| Name | OS | Processor | Memory | GPS | Larv, Surv, SR | Ad | Notes |
|-------------------------------|---------------------------------|-------------------------------------|--------------|-----|----------------|-----|--|
| Getac F110 | Windows 10 | Intel Core i7 or i5 vPro | 4 GB – 16 GB | Yes | Yes | No | |
| Handheld Group Nautiz X7 | Windows Mobile 6.5 Professional | | 64 MB | Yes | Yes | Yes | Discontinued |
| Panasonic Toughbook CF-31 | Windows 7 or 8.1 | Intel Core i5 vPro | 4 GB – 16 GB | Yes | Yes | Yes | Discontinued |
| Asus VivoTab 8 M81C | Windows 8.1 | Intel Atom Quad Core | 1 GB – 2 GB | Yes | Yes | No | Discontinued |
| Asus Transformer Book T100TAF | Windows 8.1 | Intel Z3735 (Bay Trail-T Quad Core) | 2 GB | Yes | Yes | No | Discontinued; Detachable keyboard, micro-SD card, USB slot on keyboard |
| HP Stream 7 | Windows 8.1 | Intel Atom Quad Core | 1 GB | Yes | Yes | No | Discontinued; Micro-SD card is under back cover |

SanDisk Extreme III memory cards or SanDisk Cruzer Fit USB drives are preferred.