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Instructions for "direct connect kit"

The smartbedded "direct connect kit" allows you to directly connect your Davis®[1] Vantage Pro2™ and Vantage Pro2 Plus™ cabled sensor unit to a Meteohub/Meteoplug without the need of a console or data logger. This gives you direct access to the data as it comes from the sensor unit. **Only cabled sensor units are supported (Davis® part numbers: 6152C, 6162C, 6327C, 6322C)** Received data does not include indoor temperature and humidity and does not include pressure as these values are measured in the Vantage™ console, not in the sensor unit. The "direct connect kit" does also provide power for the cabled sensor unit. All you have to to is to plugin the kit into a USB port of your Meteohub/Meteoplug and to connect the RJ11 cable of your sensor with the RJ11 jack of this kit. By the help of an adapter included in the kit you can connect the console in parallel as well.

Package Content
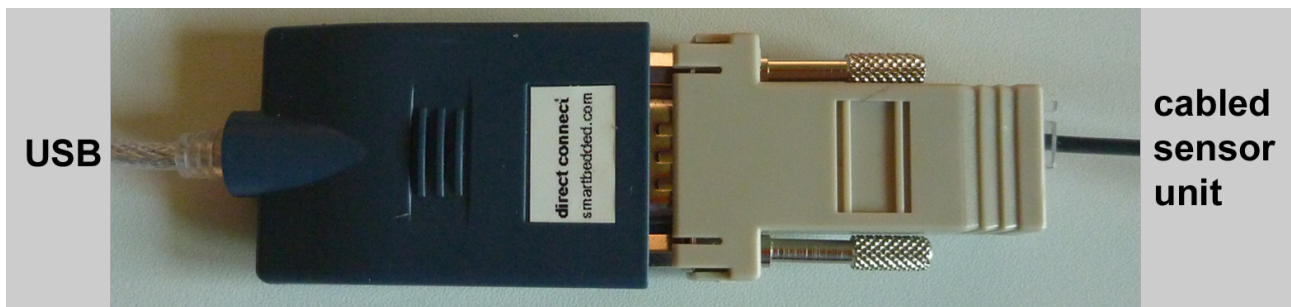
The "direct connect kit" consists of 4 pieces:

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1   The Davis logo and text is a registered trademark of Davis Instruments Corp. Vantage Pro2 and Vantage Pro2 Plus are trademarks of Davis Instruments Corp. Whenever Davis or Vantage is mentioned in this document these trademarks are referenced, even if a TM or ® should be missing.

1. **USB adapter** doing signal conversion and linking the sensor unit to your Meteohub.

2. **DB9-to-RJ11 adapter** connecting part 1 physically to the cable of your Vantage™ sensor unit.

3. **RJ11 splitter** that allows you to additionally connect the cabled Vantage™ console. This part does come in white or black.

4. **RJ11 cable** to connect the Vantage™ console to the RJ11 splitter.

5. this manual in printed form. You might also get additional info and support on this product on "http://www.smartbedded.com"

Standard Setup

Setup is done in a few simple steps.

1. Plug the DB9-to-RJ11 adapter (item #2 in the picture) to the USB adapter (item #1) and fasten the screws.

2. Plug the USB cable of the USB adapter into your Meteohub/Meteoplug.

3. Plug the cable running from your cabled Vantage Pro2™ or Vantage Pro2 Plus™ sensor unit into the RJ11 jack of the DB9-to-RJ11 adapter.

Extended Setup

As mentioned in the introduction a Vantage™ cabled Console can be connected in addition to the "direct connect kit". This allows to monitor data in parallel to make use of it via Meteohub/Meteoplug. Setting up this variation is also done in a few steps.

1. Follow instructions of the Standard setup, but do not connect the cable from the sensor unit to the DB9-to-RJ11 adapter. Instead connect the RJ11 splitter (item #3) to the DB9-to-JR11 splitter (item #2) until it clicks into place. Remark: The splitter can be released from the DB9-to-RJ11 adapter by pressing the knob on the top of the splitter.

2. Connect the cable from the sensor unit with the jack of the RJ11 splitter labeled "sensor unit".

3. Connect the Vantage™ console to the RJ11 splitter jack named "console" by using provided RJ11 cable (item #4).

4. Please note that the Vantage™ sensor unit will not work with USB adapter (item #1) not being connected to the Meteohub/Meteoplug. Reason is, that the USB adapter feeds the sensor unit with power, not the Vantage™ console like when the sensor unit does directly connect to the console.

USB

cabled
sensor
unit

Console

Meteohub Setup

1. Login to your Meteohub/Meteoplug admin web pages, go to "weather station" page and select "Davis Vantage ISS direct" as new weather station. Select "USB serial" as connection type and choose one of the devices listed in the "select" drop-down menu. When you have a 0.01 inch rain bucket size installed, please set the appropriate mark. Press "Save" when done.

2. Change to "Sensors" page and wait a minute to see all sensors coming up. Press "Refresh" to get an update of the display. You will see following sensors on a Vantage Pro2 Plus™ (a Vantage Pro2™ will not provide data for solar radiation and UV sensors). Make sure to give each sensor an ID like in the example below.

Setup of a Meteoplug system with "direct connect kit" is identical to Meteohub.

Additional Remarks

The "direct connect kit" can make Davis Vantage Console and data logger obsolete in situations where...

- you have a Meteohub solution that is always on and does not depend on a battery buffered data logging option that the data loggers from Davis® do provide.

- you don't rely on air pressure data. When you need this, you might consider buying a cheap separate pressure sensor from Toradex, "Oak USB Sensor Atmospheric Pressure" (http://toradex.com/En/Products/USB_Sensors_and_Peripherals/Oak_USB_Sensors/Atmospheric_Pressure) which can be connected to Meteohub/Meteoplug in addition to deliver pressure values.

Warning

Connecting a cabled sensor unit with your IT and network can always put harm to your rig in case of lightning strikes. Please apply additional appropriate protection mechanisms. The "direct connect kit" does not provide an over voltage protection that can handle this.