



# ping20Si

**uAvionix Ping20Si Transponder**

**QUICK START GUIDE**

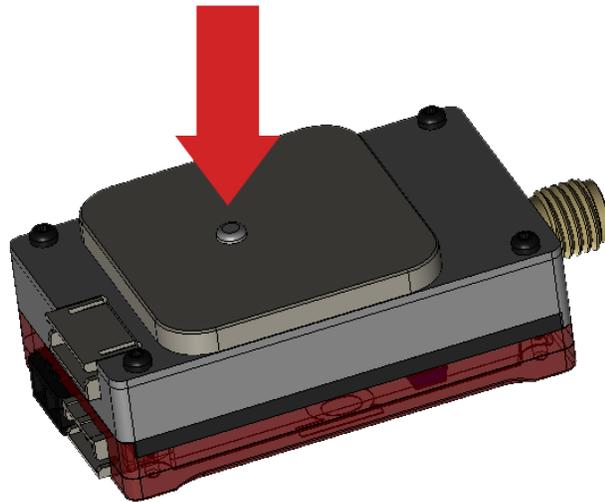


# Mount

# 1

The ping20si GPS antenna requires a clear view of the sky for proper operation. Avoid placing the device directly under props or near features that could 'shadow' or block the GPS antenna during flight. Avoid installing the ping20si under any signal blocking materials such as carbon fiber.

GPS Antenna



Prior to mounting confirm all cable lengths will be sufficient to reach a power source.

**Mount ping20si** to a suitable flat surface using the provided **double-sided mounting tape**. Affix mounting tape to the ping logo side of the transponder and secure to the aircraft.

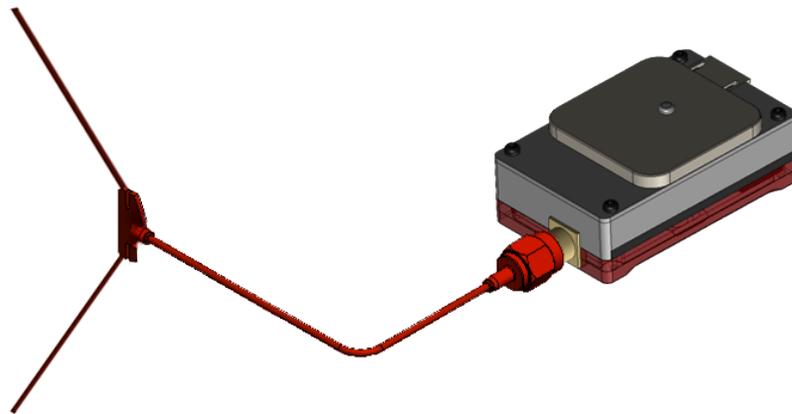


# Connect

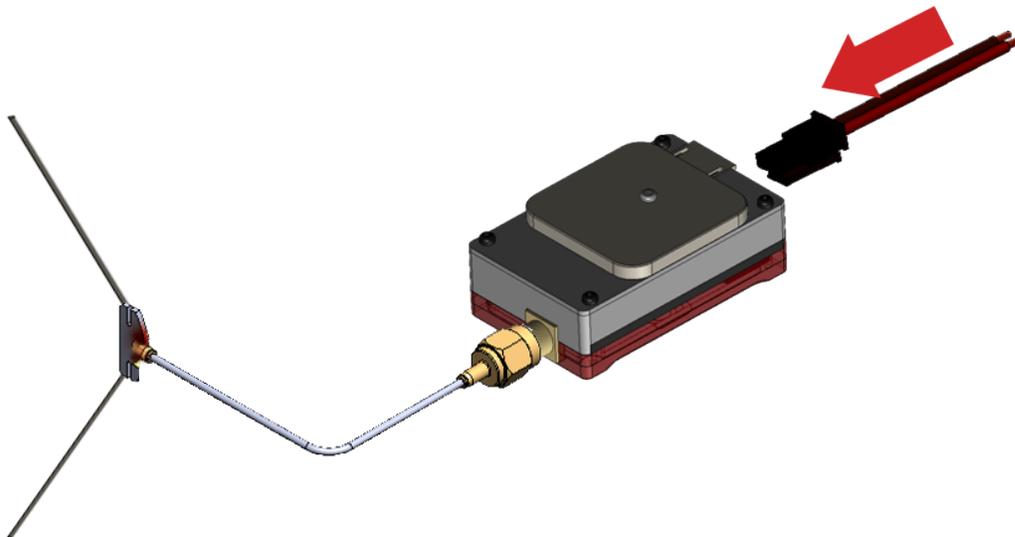
# 2

**Connect the antenna to ping20si** The antenna should be mounted in a vertical orientation using the provided double sided mounting foam.

Place the antenna in a location that will be least obstructed by the aircraft during normal flight.



**Connect power harness** to ping20si. Connect the free end of the harness to a 3S battery or appropriate aircraft power source.

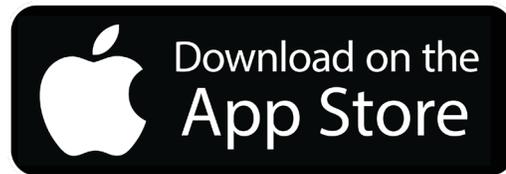




# Install

# 3

Install the uAvionix Ping App from the Apple App Store or Google Play. Search for **uAvionix Ping Installer** or use the QR codes below.



Connect the **ping Programmer** to **ping20Si** using the provided **JST ZHR-5-4 pin cable**. The 5 pin connector should be connected to the transponder. The 4 pin should be connected to the **ping Programmer**.

Apply 11-16V DC to the **ping20Si** .





# Join

# 4

Join your mobile device to the wireless network named **Ping-XXXX** using the procedure for your device. If a WPA passphrase is required enter **uavionix**. The process for iOS is shown below.

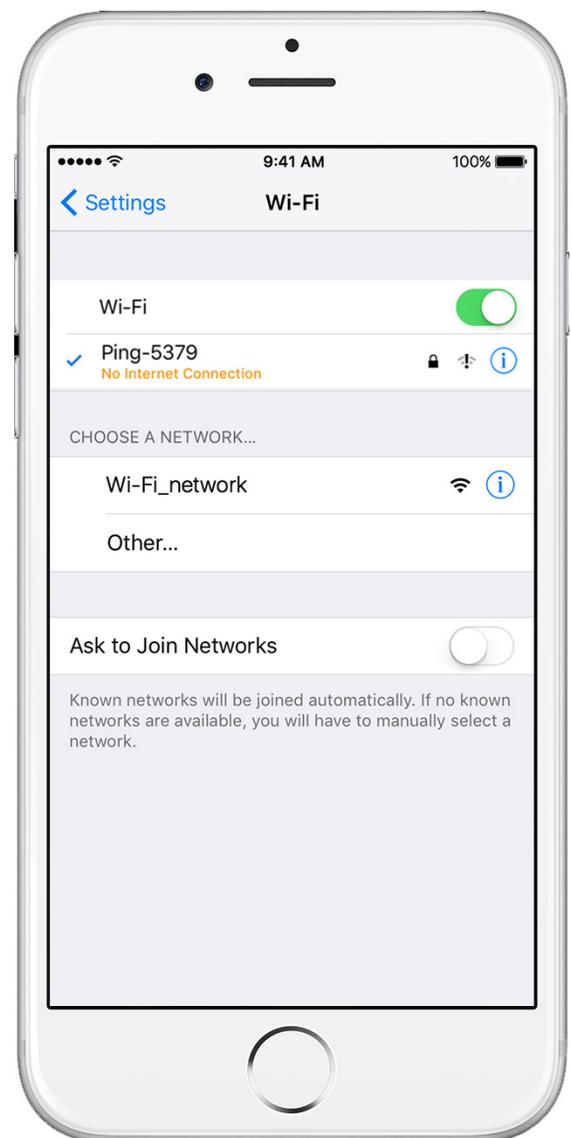
Go to **Settings > Wi-Fi**, and verify Wi-Fi is turned on.

Tap the SSID **Ping-XXXX**, where XXXX is a random string i.e. Ping-5379.

Enter **uavionix** as the WPA password, if required for the network, then tap **Join**

**Note:** *No Internet Connection* message is normal.

After device is connected proceed to step 5.





# Configure

# 5

Launch the **uAvionix Ping** application and tap **Configuration**. Complete all fields as appropriate for your aircraft.

**Selected Device Type:** Choose **ping200s/20s**.

**Control:** Select a default power up mode.

**Standby:** Transponder will not respond to interrogation.

**ON:** Replies to interrogation with 4 digit squawk code.

**ALT:** Replies to interrogation with altitude information.

**1090ES:** ADS-B transmit is always enabled when a valid 6 digit ICAO code is entered and the transponder is in ON or ALT mode.

**ICAO:** Enter your ICAO Number in Hexidecimal format. If your identifier is in octal (eight digits) format you must convert it prior to entry.

**Call Sign:** Enter the tail number of the aircraft. (A-Z 0-9)

**Emitter:** This should be set to your aircraft type. UAV is the selection for unmanned vehicles.

**VFR Code:** Enter the default VFR code for your country. The United States code is 1200.

**Maximum aircraft speed:** Select your aircraft maximum speed.

**ADS-B In Capability:** Select aircraft ADS-B receive capability. If you do not have a separate ADS-B receiver this should be set to None.

**Aircraft Length/Width:** Select the length/width value in meters that matches your aircraft.

**GPS Offsets:** GPS location relative to the roll axis and nose of the aircraft.

**COM1 Rate:** Sets the serial port communication rate. This is only necessary for serial control of the transponder.

The screenshot displays the configuration interface for the uAvionix Ping application. At the top, the 'ping' logo is shown in red and grey. Below it, a green bar indicates 'CONNECTED TO DEVICE'. Two tabs are visible: 'Configuration' (active) and 'Monitor'. The configuration fields are as follows:

- Selected Device Type:** ping200S/20S
- Default Control:** Alt
- ICAO Number (hex):** [Empty field]
- Call Sign:** [Empty field]
- Flight Plan ID:** [Empty field]
- Emitter Category:** UAV
- VFR Code:** 1200
- Maximum aircraft speed (TCAS):** Not available
- ADS-B In Capability:** None
- Aircraft Length (meters):** L ≤ 15
- Aircraft Width (meters):** W ≤ 23
- GPS Antenna Offset, Lateral from roll axis (meters):** 0
- GPS Antenna Offset, Longitudinal aft from aircraft nose (meters):** 0
- COM1 Rate:** 38400

An 'Update' button is located at the bottom of the screen.



# Update

# 6

After completing all data fields tap the **Update** button.

You should receive the **Device Configured** message, tap **OK**.

Tap **Monitor**.

**Verify** all fields are correct for your aircraft.

A GPS fix is not necessary for programming but is required to monitor latitude longitude and GPS altitude.

**Disconnect** power from **ping20si**

**Disconnect ping Programmer from ping20si.**

**ping20si** will not transmit if the **ping Programmer** is attached.

