

**PLECO DISPLAY UNIT (DU) INTERNAL PHOTOS**

**October 20, 2019**

**Subject: Nudge Systems - FCC ID: 2ATURPW2D**

**FRN: 0028614873 - EIN: 475343663 – ISED: 25251-PW2D**

**FCC Grantee Code: 2ATUR**

**FCC Grantee Code Registration Number: GC741333**

**To:**

**Compliance Testing**

**John Reynolds, TCB Manager**

**1724 S. Nevada Way**

**Mesa, AZ 85204**

**(P) 480.926.3100 / (F) 480.926.3598**

**[JohnR@ComplianceTesting.com](mailto:JohnR@ComplianceTesting.com)**

**From:**

**Nudge Systems**

**Ana Pedreiro, President**

**230 Oak Ct.**

**Menlo Park, CA 94025**

**phone. 650-799-6101**

**[anapedreiro@comcast.net](mailto:anapedreiro@comcast.net)**

## 1. PLECO PRODUCT PICTURES FOR FCC CERTIFICATION

The Pleco product consists of a Display Unit (DU) and a Sensor Unit (SU) as shown in Figure 1. Both units are required for operation.

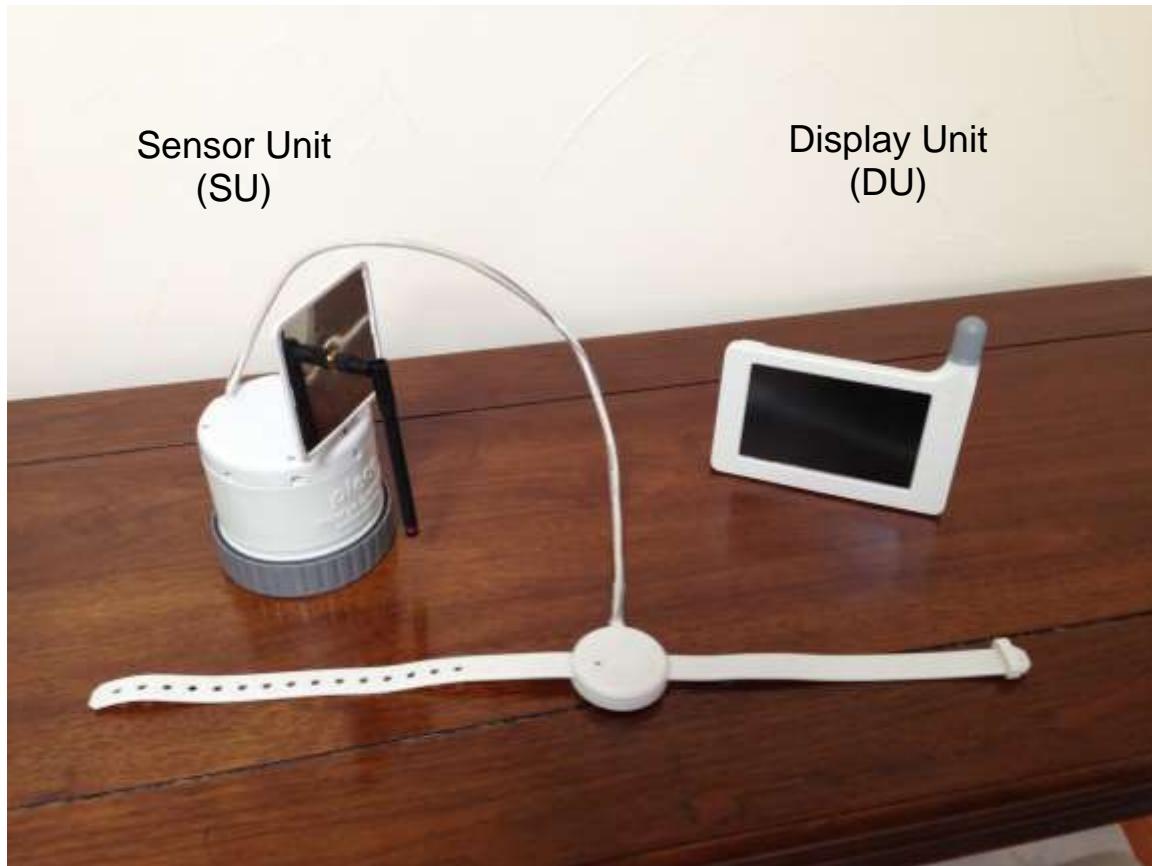


Fig. 1: Pleco product: Display Unit (DU) and Sensor Unit (SU)

## 2. DISPLAY UNIT (DU) PHOTOS

**FCCID: 2ATURPW2D**

The Display Unit is built using a front and back shell that are connected using four fasteners and contain the internal components: Circuit Card Assembly, LCD touch screen, battery, and antenna (Figure 2). The DU contains a built in 433 MHz helical antenna that can only be assessed through complete disassembly of the unit.

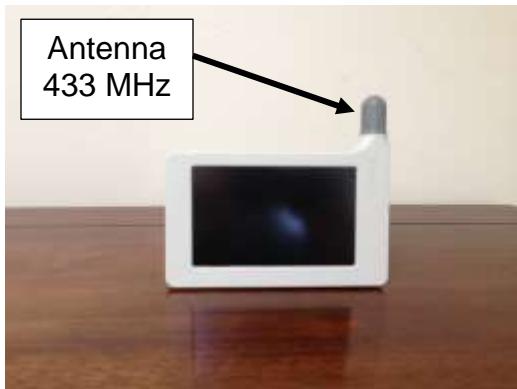


Fig. 2a: DU Front view



Fig. 2b: DU Back view

### 3. DISPLAY UNIT PHOTOS – INTERNAL

The Display Unit (DU) front and back shells are shown in Figures 3a and 3b.



Fig 3a: DU front shell



Fig 3b: DU back shell

A 5-inch touch screen LCD is mounted to the front shell, followed by the DU antenna, circuit card assembly and battery as shown in Figure 3c. The back shell is then mounted to the front shell using 4 fasteners.

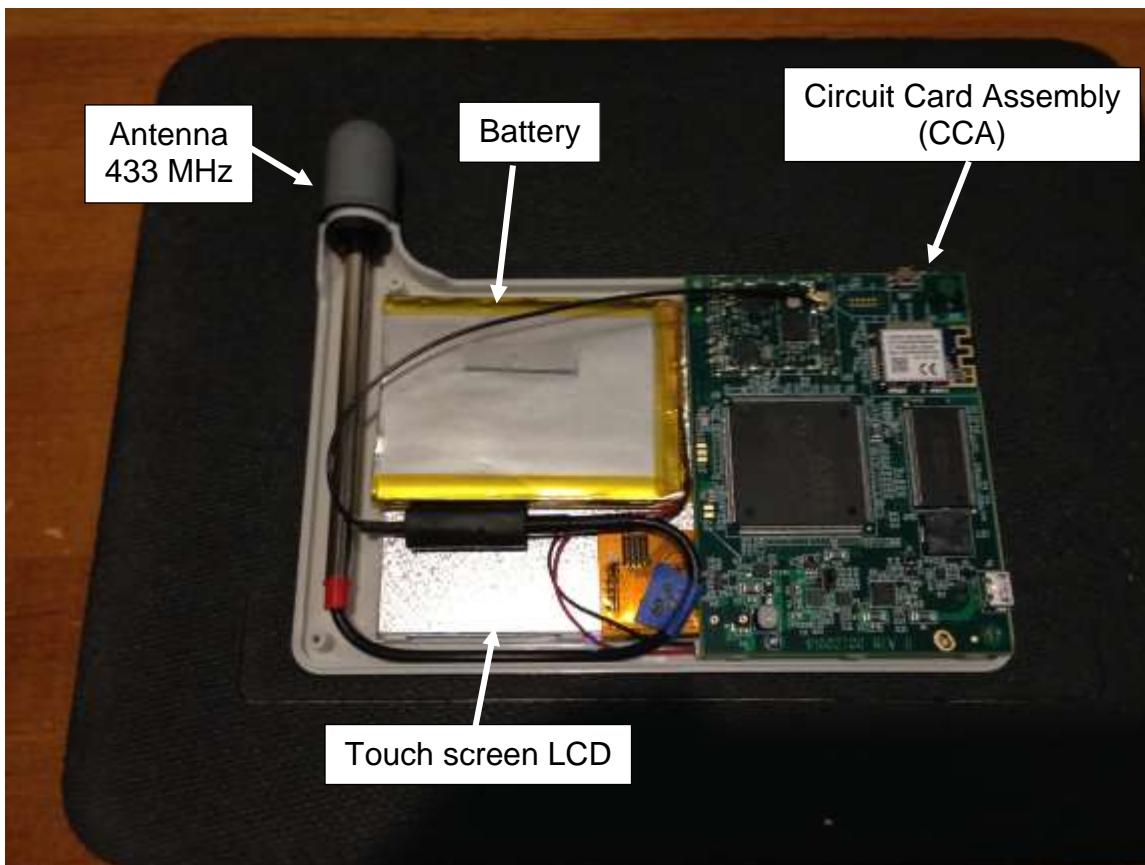


Fig. 3c: DU internal assembly

Figures 3d and 3e show both sides of the DU circuit card assembly.



Fig. 3d: DU circuit card assembly: Front side view.



Fig. 3e: DU circuit card assembly: Back side view.

The DU contains a Wi-Fi module that is an Atmel device p/n ATWINC1500-MR210PB, which has been granted modular approval (FCC ID: 2ADHKATWINC1500). The module includes a 2.4 GHz antenna. Figure 3f shows a close up view of the Wi-Fi module, including a view of the integrated antenna.

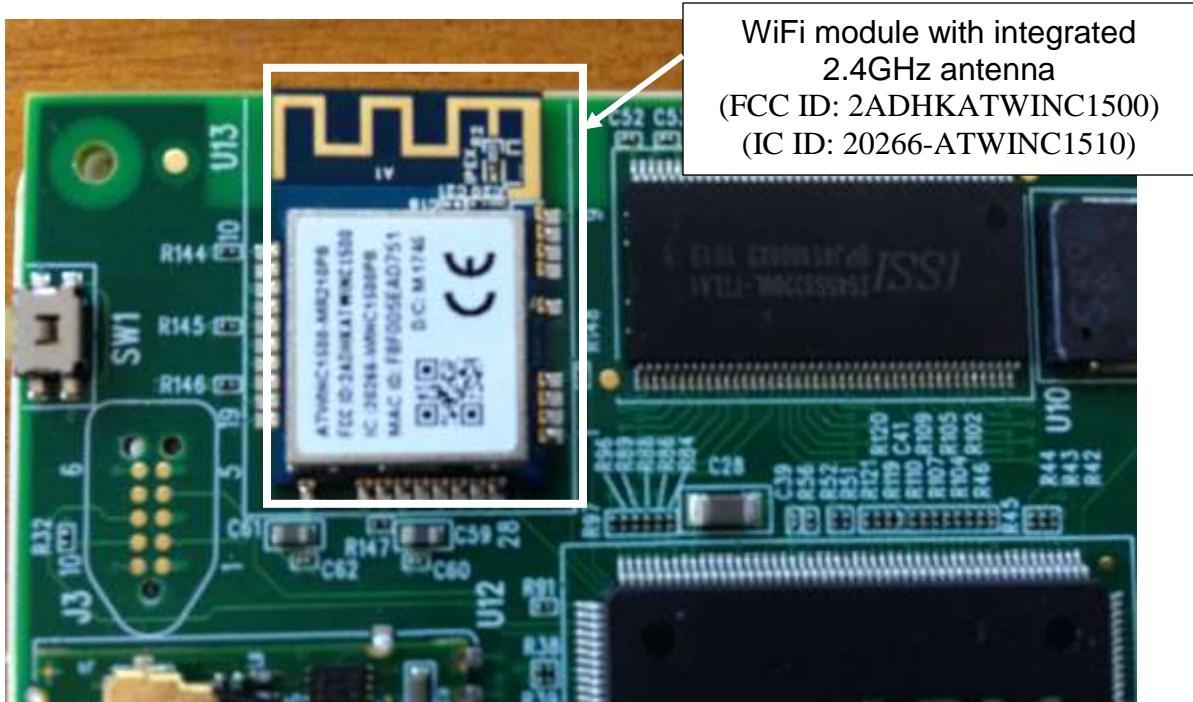


Fig 3f: Close-up view of Wi-Fi module (Atmel part number ATWINC1500-MR210PB)

#### 4. PLECO PRODUCT – MAIN DIMENSIONS

The Pleco product consists of a Display Unit (DU) and a Sensor Unit (SU) as shown in Figure 4. Both units are required for operation. The main dimensions of the DU and SU are shown in the figure.

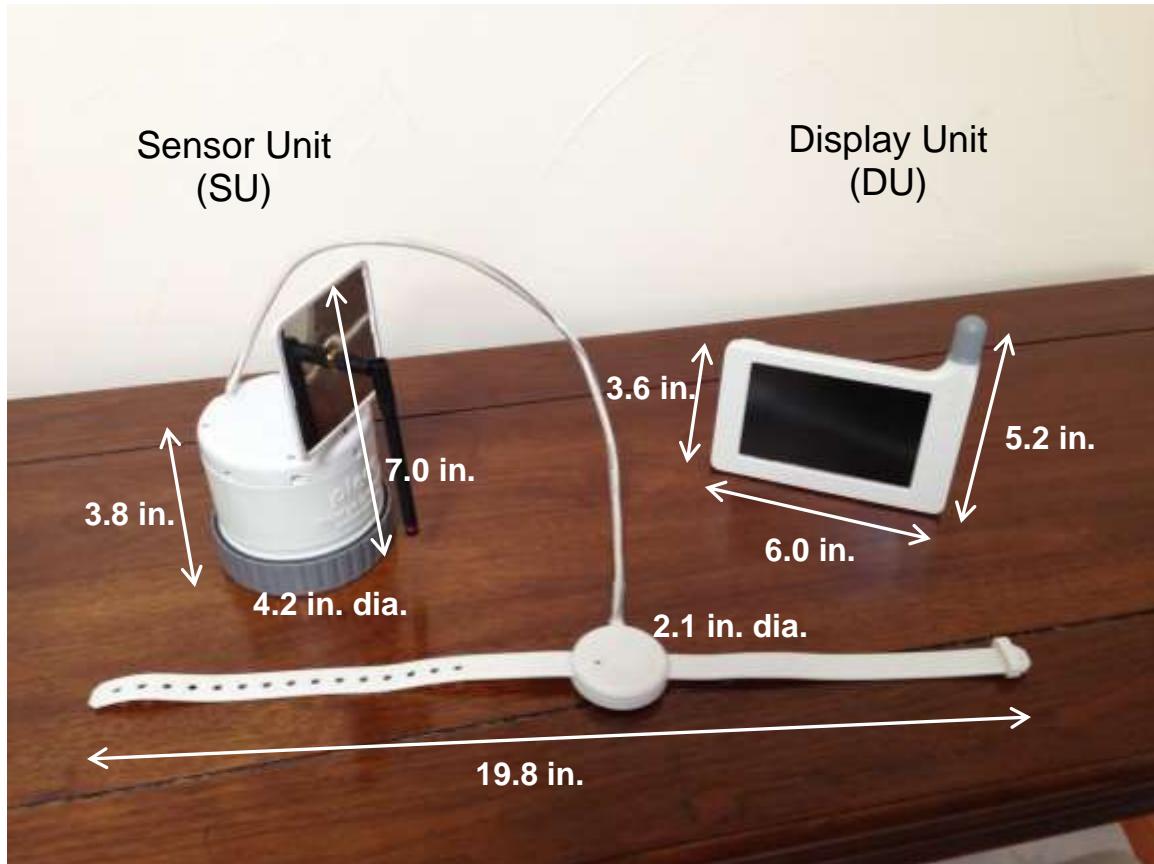


Fig. 4: Pleco product main dimensions