

The SmartSniffer™ from Trident IoT is a PC application that, when paired with compatible hardware, functions as a passive RF diagnostic tool.

This tool will capture, decode, display, and analyze wireless communication packets across multiple protocols. The application currently supports Z-Wave/Z-Wave Long range, can decrypt S0-S2 encrypted packets and Zigbee 3.0.

This guide walks you through the initial setup, compatible hardware and launch of the application.

Prerequisites : ElCap CLI - Compatible hardware (noted below)- PC with USB port

ElCap™ Setup

Install or update ElCap to the latest version.

First time users, please visit tridentiot.com/technology/software/ and follow the steps to download the version appropriate to your computer/operating system.

Once downloaded you will need to create a Trident Account.
Launch ElCap in your command line and enter.

```
elcap login
```

Follow the prompts to create an account.

Compatible Hardware

Select the hardware that matches your target protocol.

Type	Z-Wave/Z-Wave Long Range	Zigbee
Developer Board	DKNCZ20	DKNCM11
USB Sniffer	DKUCZ20	DKUCM11

Firmware Setup

USB Sniffer (DKU Series) - No firmware setup is required. *Proceed to next step.*

Developer Board (DKN Series) - You can build and flash the sniffer firmware application within ElCap.

1. Connect your developer board to your PC via USB
2. Launch ElCap in the command prompt.
3. Enter

```
elcap new
```
4. Select the SDK *--v2025.10.00-ga or later.*
5. Follow the prompt to set up the project files.
6. Select your chip -- *CZ20 for Z-Wave, CM11 for Zigbee*
7. Choose the appropriate application -- *Zniffer for Z-Wave, Sniffer for Zigbee*
8. Change to the directory of the project you just created.
9. Enter

```
elcap build
```
10. When the build is complete Enter

```
elcap flash
```
11. Select your device -- *DKNCZ20 for Z-Wave, DKNCM11 for Zigbee*

Your hardware is now ready to support the SmartSniffer application.

USB Drivers

If using the Developer boards, no USB driver is required.

For the USB Sniffer (DKU Series), a Virtual Com Port (VCP) driver from FTDI is required to be loaded on your PC.

For the appropriate driver visit [ftdichip.com > VCP Drivers](https://ftdichip.com/VCP-Drivers)

Download and Launch SmartSniffer Application

From your PC command prompt, launch ElCap and run

```
elcap tools smartsniffer
```

Elcap will retrieve the application and launch it automatically.

For future sessions, the same command will simply launch the locally stored version of the SmartSniffer application.

Navigating SmartSniffer Application

To start capturing data, select 

Select and configure the com ports connected to your compatible hardware and ensure the slider is in the on position.

Note: You can have multiple sniffer devices of any protocol connected at the same time.