InnoPhase IoT

Smart Wireless Video Platform
Ultra-Low Power Wi-Fi plus H.265+AI Video Processor
Accelerating Time-to-Market for Battery-Based Wi-Fi Video Cameras

InnoPhase IoT and Lumissil/Ingenic have partnered to develop the industry's leading smart wireless video solution. The system combines the InnoPhase IoT Talaria TWO™ ultra-low power Wi-Fi module and Ingenic's T31 Video Processor with deep learning algorithms to create a cutting-edge solution.

✓ Ultra-Low-Power (ULP) Wi-Fi at BLE power levels enables 2-4X improvement in battery life.

✓ Off-loading of cloud connectivity stack and local events monitoring when ISP is powered down to conserve power.

✓ Supports up to 2K camera resolution.

✓ Wi-Fi provisioning using integrated BLE.

Get to market quickly with application development kit that include hardware, software and design files to give your product design a head-start.

1+ Year Battery Life*
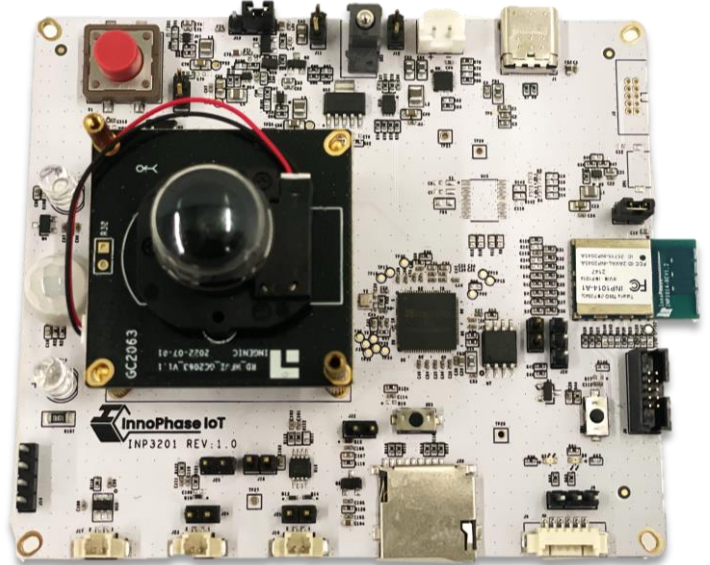
Pre-Integrated Hardware & Software

Fast Time-to-Market

Battery-Based Wi-Fi Cameras   **Video Surveillance**   **Baby Monitors**   **Video Doorbells**   **Event Monitoring**

INP3201 InnoPhase IoT Low-Power Wi-Fi Video Camera Reference Kit

- Battery-operated Wi-Fi video camera
- **Ingenic T31ZX ISP** + **Talaria TWO INP1014 Module**
- Optional **STM32 Low-Power MCU** – I/O extender & HMI
- 1080P CMOS Image Sensor, Microphone & Speakers
- PIR Sensor, LEDs & Push-button
- USB-C connector and battery connector power supply options
- T31 shut-off control by T2 or MCU for extended battery-life.
- On-board power measurement test points
- Fully Integrated Software SDK
    - T31 Linux drivers and connection manager
    - AWS Kinesis Cloud Connectivity
    - Device Provisioning over BLE
    - Firmware Over-the-Air (FOTA) & Firmware Over-Serial (FOS) Updates (FOTA)
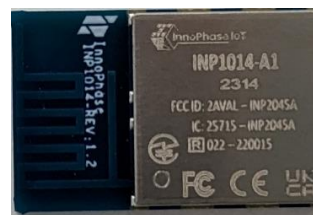   - Quick Start & User Guides

Talaria TWO Wi-Fi + BLE

- **Wi-Fi:** 802.11 b/g/n, up to MCS7 Single-stream (1x1)
- **BLE:** BLE 5.0 w/ Advanced Features: 2Mbps PHY, LE Coding (Long-Range), Extended Advertising
- **Frequency Supported:** 2.4GHz
- **Application Processor:** Arm Cortex-M3, 80MHz
- **Embedded Memories:** 512KB SRAM, 2MB Flash
- **Peripheral Interface to T31:** SDIO
- **Power Consumption:** Ultra-low power Wi-Fi to maintain cloud connectivity for battery-based products
- **Ultra-Low Power Wi-Fi:** 57uA (DTIM10), 31mA (Rx, 802.11b), 81mA (Tx, 802.11n)
- <u>Optimized Software:</u> exclusive "Dual-Stack" SW implementation shares processing responsibilities between Talaria TWO and T31 to reduce system current consumption to the lowest level

Learn More: [Talaria TWO Modules](#)

Talaria TWO Wi-Fi + BLE5 Modules

INP1014

PCB Antenna

(20.0 x 12.8 x 2.5mm)

INP1015

U.FL Antenna

(17.0 x 12.8 x 2.5mm)

Contact InnoPhase at sales@innophaseiot.com for a demonstration and access to the Smart Video ADK

* Based on 3000mAh battery