

Mars V300

Miniature wearable H.265 DVR & streamer

MARS V300 is a cutting-edge miniature H.265 DVR and video streamer designed for defense and homeland security applications. Miniature (size of a quarter), lightweight, and low power, it offers unmatched versatility with multiple wireless connectivity options, including RF datalink, LTE, Wi-Fi, and LoRa. Its robust design ensures reliable performance in demanding environments, making it ideal for real-time intelligence gathering and drone applications.

Markets and Applications

Drones and wearable covert devices for intelligence gathering

Defense

Homeland Security

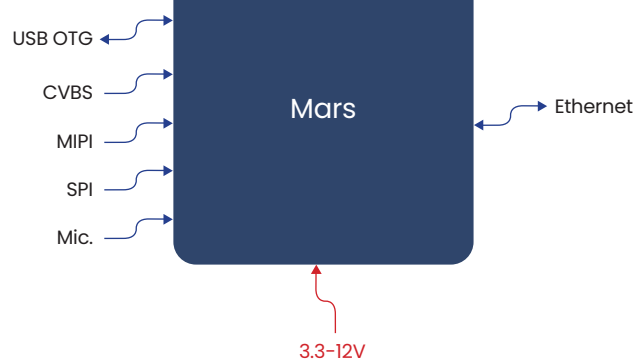
Key Benefits

- Best-in-class SWaP: miniature, lightweight, and low consumption, ideal for wearable applications
- Supports H.265 video encoding for superior quality and low-latency streaming
- Low latency, end-to-end high-performance streaming of up to 125ms

Key Features

- Multiple wireless connectivity options: RF datalink, LTE, Wi-Fi, and LoRa
- Supports RTP (Unicast/Multicast) and RTSP streaming over Ethernet
- Captures MIPI or CVBS cameras and AAC audio
- USB mass storage capability
- PC-based setup via USB or Ethernet for user-friendly configuration

Block Diagram



Technical Specifications

Functionality:

- Capture MIPI or CVBS cameras
- Capture microphone (on board or external if connected)
- Encode H.265 video channels and AAC audio
 - 2304 x 1296@25 fps
 - 2048 x 1536@20 fps + 720x576@20 fps
 - 2304 x 1296@20 fps + 720x576@20 fps
 - 1920 x 1080@30 fps + 720x576@30 fps
- Stream RTP (Unicast/Multicast) and/or RTSP channels over Ethernet
- Record MP4 files on EMMC
- Act as USB mass storage device when connected to PC
- Maintain RTC with battery backup
- Set up using PC App via USB or Ethernet

Wireless Connectivity Options (over Ethernet):

- Microhard pmDDL RF Datalink module
- Microhard pmLTE RF Datalink + LTE module
- 4/5G module
- Wi-Fi module

Each module has different dimensions and may influence enclosure dimensions.

Interfaces:

- USB OTG
- CVBS Input
- MIPI Input
- SPI Flir
- On board Mic.
- External Mic.
- On board EMMC (8GB)
- Ethernet

Other:

- Power in: 3.3-12V
- Power consumption: <1W
- Dimensions: 25 x 25 x 5 mm