



CAS-10 Ground Station Radio





Air Unit Specifications

Appearance & Interface

Appearance	Mainboard + Video daughterboard + RF daughterboard
	Video daughterboard designed for bridging HDMI signal input
	RF daughterboard designed for transceiver transmission RF signal
	Use M2 (E) connector to connect daughterboard and main board
Dimensions	76.7 x 27 mm
2 x Micro HMDI interface (foreside)	For external camera video signal input
1x2 pin connector interface (side)	Include one 5V – 12V Power Input Interface
1x3 pin connector interface (side)	Include one 3.3V / 5V Level UART Interface
1x4 pin connector interface (side)	Include two 3.3V level RC output interfaces (SBus / IBus output, optional control)
1 x Micro USB interface (side)	Debug & Upgrade Support OTG
1 x Key (side)	One button pairing connection-setup between air and ground system
	Auto channel selection for better performance, Fast connection recovery in milliseconds.
2 x Indicator Light (side)	Indicate status of pairing connection and transmission
2 x MMCX antenna interface	For transmission between ground system and air system
Functions and Features	
Processor	Soc – pinecone S1 AP: 4 x big cores, Cortex A53 @ 2.2 Ghz 4 x small cores, Cortex A53 @ 1.4Ghz
	GPU: 4 cores, Mali – T860
	SDR: A7 + DSP
Storage	LPDDR3: 1GB, eMMC: 4GB
Bandwidth	20 MHz / 10 MHz
Transmission Range	FCC 20 Km CE / SRRC 12Km
Latency	Minimum 110ms (from input source to ground control screen display)
Video Resolution	720p @ 30 fps, 1080p @ 30/60 fps
Operating Frequency	2.4 GHz ISM
Receiver Sensitivity	-99dBm @ 20 MHz BW
Interface Recovery	<1s
Power Consumption	Average below 4W



CONTROLLER Specifications

Appearance & Interface

Dimensions	217 x 106.5 x 31 mm (not included antennas and analog sticks)
Material	Plastic
Video	5.46 inches, 1080p, 16 million colors, LCD touchscreen
Audio	Built-in Speaker x1, built-in Mic x2
Remote Control	Rocker x2 / Wheel x1 / Bottom Key x6 / with back light top key x1 (right)
Modem	BT / WiFi / GPS 2.4G transmission ground system
Indicate Light	Top tri-color light x2 (left, right)
Interface	MicroUSB x1 TFlash x1 (Supports maximum expansion capability up to 64Gb)
Antenna	Directional antenna (4.5dBi) x1 / sectional omni Antenna (2dBi) x1
	Sectional built-in WiFi antenna/built-in GPS antenna
	External GPS Antenna interface
Battery	Bult-in 4950mAh Lipo Battery
Charger	Support Micro USB 2A Charge
Features	
Processor	Soc – pinecone S1 AP: 4 x big cores, Cortex A53 @ 2.2 Ghz 4 x small cores, Cortex A53 @ 1.4Ghz
	GPU: 4 cores, Mali – T860
	SDR: A7 + DSP
Storage	LPDDR3: 2GB, eMMC: 4GB
Bandwidth	20 MHz / 10 MHz
Transmission Range	FCC 20 Km CE / SRRC 12Km
Latency	Minimum 110ms (from input source to ground control screen display)
Video Resolution	720p @ 30 fps, 1080p @ 30/60 fps
Operating Frequency	2.4 GHz ISM
Receiver Sensitivity	-99dBm @ 20 MHz BW
Interface Recovery	<1s
Power Consumption	Average below 4W *Only whieb Transmission system working, medium brightness, WiFi closed, GPS closed