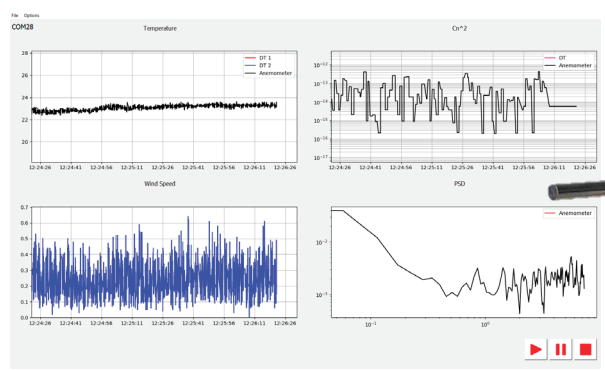


# EMRC Heli

Autonomous UAS Systems – sUAS Design to Operation

## Atmospheric Characterization Payload (WP-V2 ACP)

Complete and customizable meteorological sensor suite for making low earth atmospheric measurements that can be integrated into a wide range of UAS platforms.



### FEATURES

- Live Display
- Built in GPS
- Customizable/Upgradable Sensors (I2C, SPI, Analog)
- Live Telemetry
- Open SDK
- DJI M600, IEV2, Egoo, and E1250 supported UAS

### APPLICATIONS

- Atmospheric Profiling
- Urban Terrain Profiling
- Wild Fire Monitoring
- Forecasting Tool
- Storm Chasing
- Education and Research



Atmospheric Characterization Payload (WP-V2 ACP)			
Component	Feature	Specs	Unit
Anemometer	Wind Speed	Range	0-50 m/s
		Resolution	0.1 m/s
		Accuracy (0-15 m/s)	+/-0.1 m/s
		Accuracy (15-30m/s)	+/-2 %
	Wind Direction	Range (x,y)	360 Deg
		Range (z)	+/-30 Deg
		Resolution	+/-1 Deg
		Accuracy	+/-1 Deg
	Temperature	Range	-25-80 C
		Resolution	0.1 C
		Accuracy	+/-2 C
	Humidity	Range	0-100 %
Accuracy		+/-5 %	
Pressure	Range	50-115 kPa	
	Accuracy	+/-1 kPa	
Tilt	Pitch and Roll	+/-180 Deg	
	Accuracy	+/-0.5 Deg	
Compass	Heading	360 Deg	
	Accuracy	+/-5 Deg	
DAQ	Data Storage	SD Card	32 GB
	System Speed	Frequency	20 Hz
Total Weight		0.75	kg
Boom Height		46	cm
Input Power		14-50	VDC
Options			
DTS	Temperature	Type	K
		Range	-40-125 C
		Resolution	0.0625 C
		Accuracy	0.5 C
Solar	Irradiance	Spacing	15-30 cm
		Range	0-2000 W/m^2
		Resolution	0.25 W/m^2
		Accuracy	+/-5 %
Spectrum		360-1120	nm