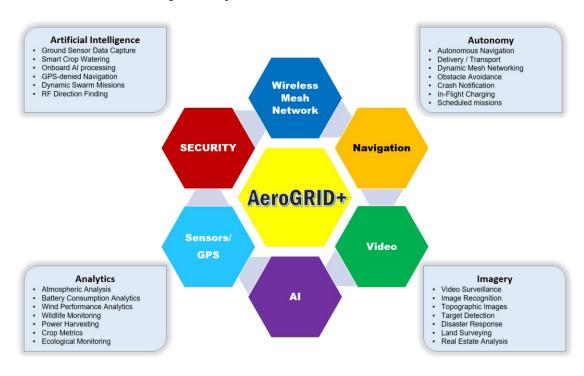




AeroGrid+ is a drone swarm technology that facilitates the formation of an interconnected swarm of drones that operate autonomously by sharing situational awareness and operational information.

AeroGrid+ is drone-agnostic and can be used with most drones. It is driven by a software application which can be changed in order to change the functionality of specific drones in the swarm.

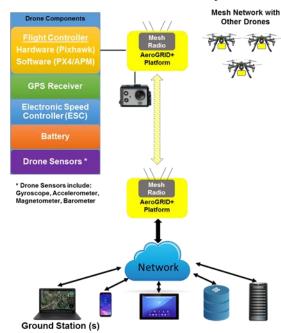


## AeroGRID+

## The Old Way

## P-P Radio Flight Controller Hardware (Pixhawk) Software (PX4/APM) GPS Receiver Electronic Speed Controller (ESC) Battery Drone Sensors include: Gyroscope, Accelerometer, Magnetometer, Barometer Radios/ Hub Ground Station

## The AeroGRID+ Way



AeroGRID+ hardware platform includes one or more Multi-Input-Multi-Output (MIMO) mesh radios operating in the unlicensed ISM frequency bands of 2.4GHz or 5.8GHz supporting secure broadband IP links. Platform Model AG100 contains a single 2x2 MIMO radio and Model AG100PRO contains two 2x2 MIMO radios for extended range.

Frequencies/ Protocols	ISM frequency bands –2.4GHz, and 5.8GHz. Protocols 802.11a/b/g/n/ac		
Radio Performance	Frequency	2.4 GHz	5.8 GHz
	Configuration	2x2 MIMO	2x2 MIMO
	Tx Power	1000mW,	500mW,
		30 dBm	27 dBm
	Rx Sensitivity	-96 dBm	-96 dBm
Antennas	3.8dB = 7.5 in (6.6 in + knee), 3.2dB = 5.9in (5 in + knee), 2dB @ 4.25 in (3 in + knee)		
Routing Protocol	Derivative of the popular BATMAN routing protocol. Ideal for multi-hop ad hoc mesh networks due to reduced throughput degradation compared to other standard protocols.		
Security	Embedded security design Including FIPS 140-2 encryption and SSH and VNC for remote configuration. AES 256 encryption.		
Dimensions (w/o	Model AG100 = 3.5 in (L), 2.0 in (W), 2.0 in (H)		
antennas)	Model AG100PRO = 3.5 in (L), 2.5 in (W), 3.0 in (H)		
Weight (w/antenna, w/o case)	Model AG100 = 4 oz., Model AG 100PRO = 8 oz.		
Power	8 - 60 VDC		
Temperature	Operating = -40°C to +85°C		
	Storage = -40°C to +85°C		
Humidity	Operating = 20% to 90% Non-condensing		
	Storage = 5% to 95% Non-condensing		
Video Input	HDMI @ 1080p 30 max, HDMI Micro Connector		
Video Output	HDMI @ 1080p 60 max, HDMI Micro Connector		
Ethernet	10/ 100 BASE-T, RJ-45 Connector		



AeroGRID+ Model AG100



AeroGRID+ Model AG100PRO