

Technical Specifications- Drone

Parameters		
	Model	AUS – Insight 2.0
		
1.	Configuration	Multi-copter with Vertical Take-Off and Landing
2.	Flight mode	Fully autonomous and does not require any manual flying for mapping the required area.
3.	Endurance	>40 Minutes
4.	Max Range	2 km in radio Line of Sight
5.	Max Flight altitude	400 Ft AGL (as per DGCA Norms)
6.	Weight	3.6 Kg
7.	Flying Speed	5m/sec
8.	Area coverage	Up to 100 hectares in single flight with resolution of 3.5 cm or better.
9.	Launch and recovery	Vertical take-off and land from/in 5m X 5m patch of land.
10.	Wind resistance	Operates in wind speed up to 15m/s
11.	Operating temperature range	0 to +50 degree Celsius.
12.	Fail safe features	<ul style="list-style-type: none"> - Emergency Return to Launch position option - Autonomous return to home on communication link loss - Geofencing option to restrict both horizontal and vertical flight envelope of the drone - Autonomous return to home or land (programmable) in case of power loss - Collision avoidance System
13.	Portability	The drone is portable enough to be carried by 1 person or in a car.
14.	Ground control Software: Skylink	<ul style="list-style-type: none"> - Ground control and mission planning software for planning of flight path as per the principles of photogrammetry - Digital map overlay to show live drone position and relevant parameters all the time.
Sensors		
1	Image sensor	
a.	Effective pixels	20.4 megapixels
b.	Sensor size	1" image sensor
c.	Mapping pixel size	= or better than 3 cm for images captured from an altitude of 100 m or higher above the ground.
2	Positioning sensor	<p>The drone consists of survey grade on-board PPK for accurate geo-tagging of the images.</p> <p>For Standard PPK base, the base needs to be placed on a known point for which the coordinates are collected separately.</p>