



Radio Monitoring

Airborne Monitoring

LS OBSERVER

Airborne Monitoring Unit (AMU) 106w

TECHNICAL DETAILS LS OBSERVER AMU 106w

RF Characteristics		
RF Characteristics	Frequency range	20 MHz to 6 GHz
	Max. input level	-152 dBm/+20 dBm, 0 VDC
	Instantaneous bandwidth	up to 27 MHz

Measurement Functionalities		
Measurement Functionalities	RF scanning	yes
	Direction Finding (DF)	yes (AoA calculation from 360° turn)
	Geolocation	yes (triangulation of sequential DF measurements)
	Demodulation	yes (FM, AM, DSB, USB, LSB, CW)
	IQ recording	yes

Antenna Characteristics		
Antenna characteristics	Lower frequency range	20 MHz to 400 MHz (loop antenna)
	Medium frequency range	400 MHz to 1300 MHz
	Higher frequency range	900 MHz to 6 GHz

Operational Parameters of the UAS		
Operational Parameters of the UAS	Platform	COL-X8 multi-rotor with removable carbon arms
	Propulsion	electrical, 4x2 motors 300 kV
	Propeller size	18" x 5.5" (standard configuration)
	Max. flight height¹	500 m, 80 m with tether kit

Powering of the UAS			
	Battery version	Tether supply	
Powering of the UAS	Typ. flight time	up to 15 minutes with 4 x 4500 mAh batteries	unlimited ²
	Power input		AC mains 120-240 VAC
	Power monitoring	via telemetry	power monitoring with acoustic alarm, automatic short term LiPo Backup

Communication			
	Battery version	Tether supply	
Communication	Aircraft control frequency		2,4 GHz
	Aircraft telemetry frequency³		433 MHz / 868 MHz / 900 MHz
	Live measurement data	via WiFi	via CAT-6 Ethernet cable

Environmental Parameters			
Environmental Parameters	Temperature range	+5° C up to +45° C	
	Weight	UAS: 8,5 kg incl. payload Tether ground power converter: 25 kg	
	Dimension in mm (W/H/D)	UAS 1004 x 425 x 1004 mm Tether ground power converter 560 x 455 x 265 mm	

¹ depending on weather conditions and payload

² maximum flight time limited by other factors than powering

³ depending on country regulation

For further information, please visit our website www.LStelcom.com or contact Info@LStelcom.com.