Global Spectrum Experience

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 bandwith	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 height[1]	500 m, 80 m with tether kit

Powering of the UAS

Powering of the UAS	Battery version	Tether supply
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

Communication	Battery version	Tether supply
Aircraft control frequency	2,4 GHz	
Aircraft telemetry frequency[3]	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.

DBA