# Mini UAV autopilot (light enclosure)

# Tactical UAV autopilot (hard box with vibration absorbers)





### **UAV FCS General Specification**

Weight, g < 350

Dimension, mm ~ 120 x 90 x 50 (without GPS antenna)

Voltage, V 10...28 DC

Power, W 5 (on 12 V)

PWM Control Channels 12

Including in default configuration:

Throttle 1

Elevator 1

Rudder 1

Ailerons 2(1)

Autopilot ON/OFF 1

Interface

RS232 2

RS422 4

## **Specification**

### **Electrical**

Input voltage VDC	1030
Power W (max)	2
Servos voltage VDC	5

#### **Environmental**

Temperature deg C	-40 ~ +70
Vibration/Shock g (survival)	20

#### **INS/GPS** system performance

Angular rates (max) deg/sec	300
Accelerations (max) g	10
Altitude (max calibrated) ft (km)	15,000 (5)

#### **Dynamic Ranges**

		Range	Resolution
Roll, Pitch	deg	±180, ±90	0,05
Accelerations	g	±10	10 <sup>-4</sup>
Heading	deg	0360	0,1
Angular rate	deg/sec	±150	10 <sup>-3</sup>
Max. calibrated altitude	m	6,000	0,2
(for barometric altimeter)	ft	18,000	1

Ground Station allows remote control of UAV, receives and processes navigation data from UAV via the data-link, supports flight planning and communicates with the autopilot board on ground via RS232 interface (flight plan upload, system configuration and control laws adjustment). Conventional Remote Control is responsible for Autopilot engagement and disengagement as well as allows manual / remote controlled flight operations during visual contact with UAV. If Data Link is installed, Ground Station can support flight control without visual contact with UAV through proprietary software application with predictive flight guidance and synthetic vision capability.