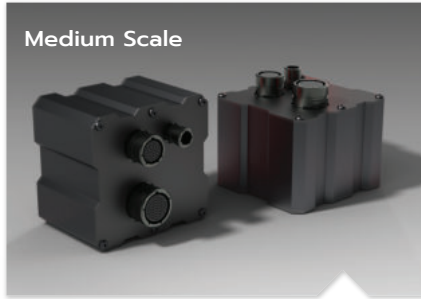




RV CONNEX

AUTOPILOT SYSTEM



FEATURES :

Hardware Architecture

Technology : FPGA technology, quad core application processor, dual core real-time processor
Operating System : RTOS, VxWorks (Wind River)
Redundancy : Triple redundancy
Standard : DO-254, DO-178, DO-160

Flight Control

Flight Control : Fully 3D three-axis control
Attitude Estimation and control : 50-1000 Hz update rate
Flight Plan : Up to 250 waypoints
Speed Control : Auto-throttle for all vehicles
Airfield Operations : Automatic take-off and landing
Engine : Combustion
Platforms : Fixed-Wing

Mechanical

Dimensions Lx W x H :
 250 x 170 x 100mm
Weight : 2500g

Electrical

Supply Voltage : 9 VDC to 28 VDC
Power Consumption : 15W
Operating Temperature Range : -40 °C to 85 °C

Device and Sensor Interfaces

2x GNSS/INS interface
 2x IMU/INS Interface
 4x Servos Bus (support redundancy)
 2x communication interface
 2x power management interface
 Support storage management unit

AUX Interfaces

2x RS-232
 2x RS-485
 2x RS-422
 1x CAN
 2x Ethernet
 4x analog input
 8 discrete Input / Output
 2x ARINC 429 Tx
 8x ARINC 429 Rx
 MIL-1553 dual redundancy bus

FEATURES :

Hardware Architecture

Technology : ARM® Cortex®-M7 32-bit 216 MHz
Flight Control
Flight Control : Fully 3D three-axis control
Attitude Estimation and control : 50-1000 Hz update rate
Flight Plan : Up to 250 waypoints
Speed Control : Auto-throttle for all vehicles
Airfield Operations : Automatic take-off and landing
Engine : Combustion
Platforms : Fixed-Wing

Flight Control

Flight Control : Fully 3D three-axis control
Attitude Estimation and control : 50-1000 Hz update rate
Flight Plan : Up to 250 waypoints
Speed Control : Auto-throttle for all vehicles
Airfield Operations : Automatic take-off and landing
Engine : Combustion
Platforms : Fixed-Wing

Mechanical

Dimensions Lx W x H :
 100 x 100 x 150mm
Weight : 1800g

Electrical

Supply Voltage : 22 VDC to 28 VDC
Power Consumption : 12W
Operating Temperature Range : -10 °C to 75 °C

Device and Sensor Interfaces

2x GNSS/INS interface
 2x IMU/INS interface
 2x Bus servos (support recovery bus)
 2x Communication interface
 Power management interface
 Magnetometer
 Laser altimeters (support ATOL)
 Payload control unit
 Support storage management unit

AUX Interfaces

2x RS-232
 1x RS-485



FEATURES :

Hardware Architecture

Technology : ARM® Cortex®-M7 32-bit 216 MHz microcontroller
Flight Control
Flight Control : Fully 3D three-axis control
Attitude Estimation and control : 50-1000 Hz update rate
Flight plan : Up to 250 waypoints
Speed Control : Auto-throttle for all vehicles
Airfield Operations : Automatic take-off and landing
Engine : Electronic, Combustion
Platforms : Fixed Wing, Multicopter

Flight Control

Flight Control : Fully 3D three-axis control
Attitude Estimation and control : 50-1000 Hz update rate
Flight plan : Up to 250 waypoints
Speed Control : Auto-throttle for all vehicles
Airfield Operations : Automatic take-off and landing
Engine : Electronic, Combustion
Platforms : Fixed Wing, Multicopter

Mechanical

Dimensions Lx W x H :
 120 x 65 x 35mm
Weight : 350g

Electrical

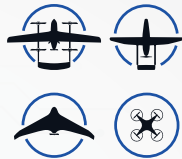
Supply Voltage : 9 VDC to 28 VDC
Power Consumption : 5W
Operating Temperature Range : -10 °C to 85 °C

Built-in Sensors

Primary / Secondary IMU sensor
 Magnetometer sensor
 GPS/GNSS receiver
 Supports external IMU sensor
 Air Data System
 Supports external sensor range
 ADC sensor

Interfaces

PWM : Up to 11 Ch.
Serial Interface : RS-232, RS-485, RS-422
Ethernet : 1 Ch.
Digital Input : 5 Ch.
Analog Input : 8 Ch.



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Remarks : In keeping with our policy on continuous product improvement, this brochure is subject to change without notice.

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