



PROCESSOR

800MHz ARM core
3 additional microcontrollers for HW interfacing

EXTERNAL INTERFACES

Ethernet, USB, 4x RS232/RS485 serial
11x TTL serial, 8 to 16 analogue inputs
8 to 16 GPIOs, I2C and SPI

ONBOARD SENSORS

3-axis gyro, accelerometer & magnetometer
Absolute and differential pressure
External and board temperature
System voltage and current
Payload voltage and current
Servo voltage and current
Motor voltage and current

OFFBOARD SENSORS

Range sensors
GPS

FILTERING

Kalman filter based AHARS

STORAGE

Logging and storage on Micro MMC card

CONTROL LAW INTERFACE

Matlab Simulink © RTW Target
www.bbsr.co.uk
Tel: +44 (0) 1234 212001

SNAP

BRING YOUR UNMANNED SYSTEM TO LIFE IN RECORD TIME

An easily accessible Matlab Simulink® interface allows SNAP to be readily programmed to control platforms and on-board systems. Available as an OEM module or in a sealed enclosure, SNAP has controlled diverse unmanned missions on platforms from 500mm wingspan Micro Air Vehicles, Coanda effect “flying saucers”, rocket launched UAVs weighing in excess of 150kg and unmanned sea planes. SNAP comes complete with all the sensors you will need for a range of platform controls.

CAPTURE CRITICAL FLIGHT DATA

SNAP’s logging facility lets you record any parameter to which the autopilot has access. This can be especially useful for platform R&D.

TAME COMPLEXITY WITH SNAP-NET AND SNAP-SERVER

The requirements that drive unmanned systems can lead to complexity. Co-ordinated control of multiple vehicles, distributed control of dozens of subsystems on a single vehicle, and dissemination of telemetry to an arbitrary number of clients on a remote network - these are just some of the challenges addressed by SNAP-NET and SNAP-Server.

SNAP-NET is a network enabled version of SNAP. It allows multiple autopilots to exchange information efficiently, enabling coordinated control of separate platforms over mobile ad-hoc networks, as well as distributed control of physically large systems, where several autopilots may be used as local sub-system controllers.

SNAP-Server communicates with SNAP over a data link. It provides service to any number of client programs (including our GCS) via IP networks.

