Avionics Hub
CE949

Datasheet

Description

The Avionics Hub provides a central routing point for the CAN inside an airframe. It also provides a simplified manner of connecting multiple aircraft systems to an external PC with a single USB cable (and no external adapters).

The Hub provides three RS232 ports for connection to various systems, and a PC interface to the aircraft CAN. These interfaces enumerate as COM ports on the host PC, via an on-board electrically isolated USB adapter (which protects both the PC and aircraft from any potential ground loop or fault conditions).

Additionally, the hub provides correct CAN termination, to ensure high signal integrity. It also provides for routing of power and communication connections to various subsystems around the airframe.

The hub enables to customer to perform engineering tests, configure the engine components and update firmware if required.

Features

The Avionics Hub features a range of connector groups for interconnecting a wide variety of UAV subsystems.

- Single USB port for connection of all communication subsystems to a PC
- Three RS232 serial ports
- Three CAN stub connections (< 0.3m)
- Four CAN connectors, arranged in a loop topology
- Correct termination of the CAN as per the CAN specification
- Dimensions: 73 mm x 47 mm x 22 mm (2.9” x 1.9” x 0.9”)

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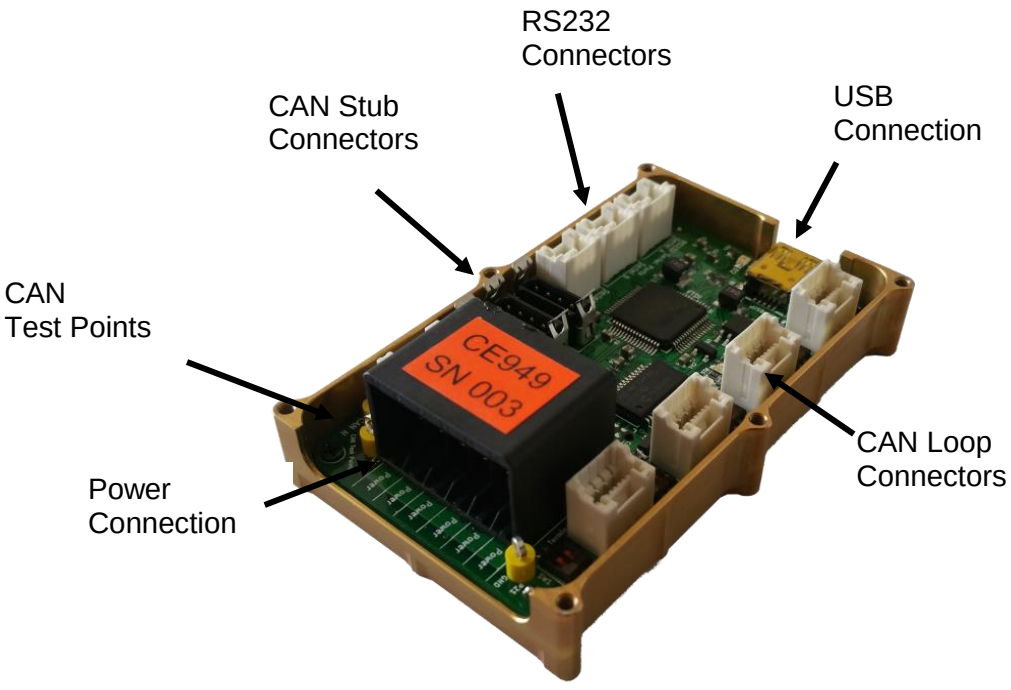

The system layout is shown overleaf.

System Layout

The avionics architecture system layout is specified in detail in the *Avionics Architecture using CAN* Whitepaper. An example layout for connecting the Avionics Hub to the various aircraft systems is shown below.