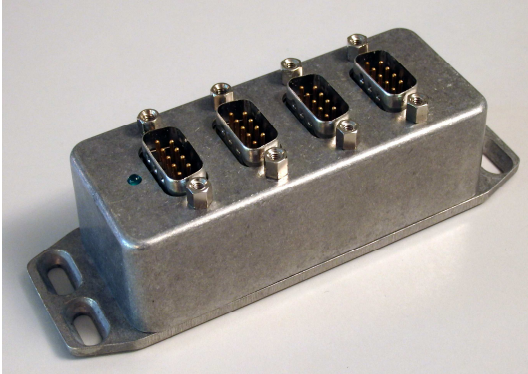


## CAV01C: Data Hub and Power Conditioner



A robust and reliable interconnection solution for avionic and automotive bus applications.

Features four identical port connections and power conditioning.

Simplifies cable planning, installation and maintenance.

Ideal for Rotax 912iS EMS installations.

### Applications

- Avionic and Automotive Data Systems.
- Digital signal and power distribution.

### Features and Benefits

- All ports use standard D-Sub connectors and have identical pin-outs to eliminate connection errors.
- Provision of four matched data lines (suitable for two CANbus systems or GPS NMEA-data systems).
- Provides 10V regulated DC power to protect against engine start-up spikes and generator noise.
- Uses linear (not switch-mode) technology, eliminating any power supply or digital noise.
- Optional variants can supply regulated 5V and 3V3 for GPS or other low voltage systems.
- LED indication of power.
- Supplied with four matching D-Sub connectors and housings.

### Typical Usage in Rotax 912iS Equipped Light Aircraft

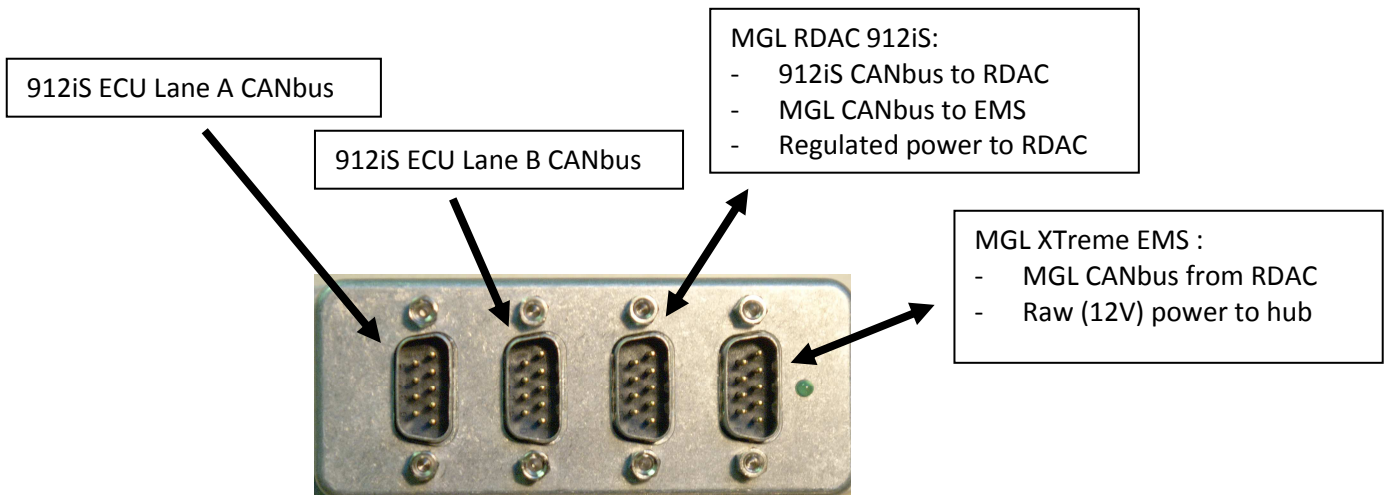
The Rotax 912iS fuel-injected engine brings modern technology to the field of light aviation. It is easier to operate and maintain than a conventional, carburetted engine although its installation can place additional demands on the aircraft wiring and power supply systems depending on the type of engine instrumentation being used.

With a wide choice of options for engine data display from a variety of vendors, a simple solution for connecting CANbus-enabled devices together and providing power regulation and distribution to the sub-modules (such as individual CANbus instruments, remote compasses, AHRS and RDAC units etc.) becomes increasingly useful. The CAV01C data hub and power conditioner provides such a solution.

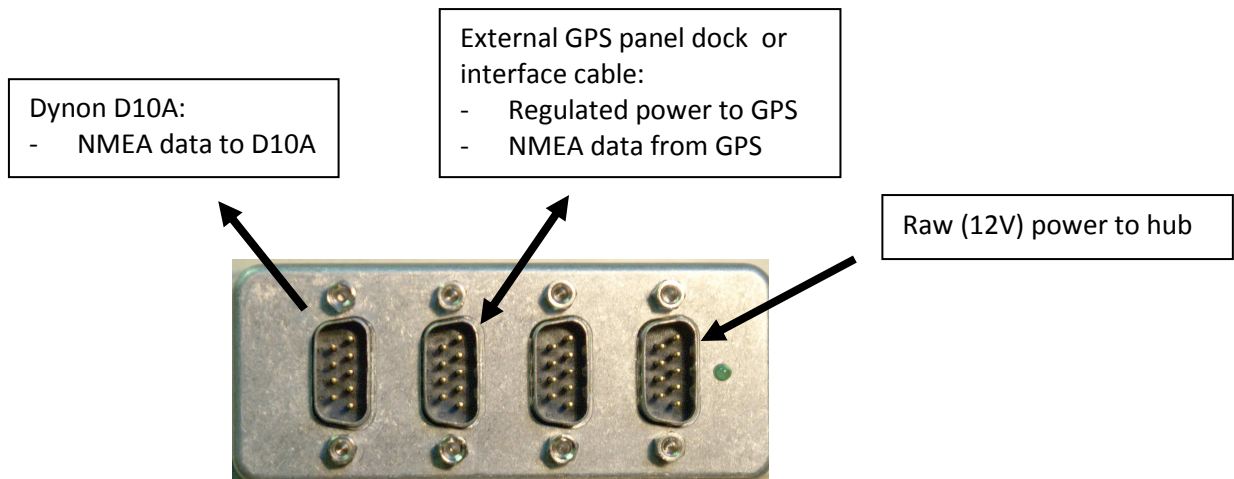
While it is always possible to build all connections into a single, multi-connector, tailored wiring harness, such harnesses can become quite complex. Using a hub such as the CAV01C enables each system module to have a dedicated cable and this greatly simplifies the planning, construction, fitting and testing of each module and its associated connections. It also simplifies subsequent maintenance and any changes that may be required in the future, for example if a module needs to be re-positioned.

The diagrams overleaf illustrate just two examples of how the CAV01C hub can simplify data connections within a light aircraft environment. The CAV01C installation manual gives precise connector pin-outs for these examples.

## CAV01C: Example 1: Rotax 912iS and MGL XTreme EMS



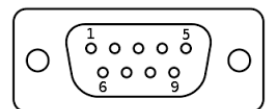
## CAV01C: Example 2: Dynon D10A with External GPS Receiver



Note that all the ports have the same pin-out so any cable can be connected to any port. This makes installation simple and eliminates plugging errors.

### Technical Details Summary

- Overall size (mm): 121L x 38W x 36H (including mounting flange)
- Weight: 125g approx.
- Power input: 12 – 20 VDC
- Regulated power output: 10V at 1A (maximum, total all ports).



CAV01C Pin-out (Male 9-pin D-Sub Top View)

Pin	Function	Pin	Function
1	Data 0	6	N/C
2	Data 1	7	N/C
3	Data 2	8	10V Out
4	Data 3	9	+V (Raw) In
5	GND		

For further information email [info@cambridgeavionics.com](mailto:info@cambridgeavionics.com)

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