ULTRA

Steering Control Unit

High integrity position monitoring and control

Key features

- Small, lightweight and reliable
- Design Assurance Level A - hardware and software
- ARINC 2MCU construction
- Control Lane architecture to suit any customer requirement
- Fully automatic Built-in-Test capability to monitor the health of its own circuits
- Convection cooled - forced air cooling is not required
- Configurable to perform additional functions such as backup hydraulic control and brake temperature monitoring.

Overview

Our Steering Control Unit (SCU) controls the steering of the nose landing gear. It receives crew commands from the cockpit, both from tillers and from the rudder pedals. It monitors the position of the landing gear and signals from aircraft systems so that it interlocks can be implemented if required.

The controller receives input from position sensors which report the position of the nose wheel, the tiller and the servo valves. The controller interprets these signals and determines the required outputs to the servos.

We offer steering controllers with built in tiller assemblies, as well as standalone units. Each controller contains two printed circuit boards which are mechanically separated to create independent and redundant control lanes, or separate monitor lanes depending on the customer requirement.

Steering Control Unit key information

Full Design, Supply and Support Service

We offer our customers a full design, development, qualification, supply and worldwide support service. This is often in accordance with the customer's own processes and systems.

Product category

ATA32

Features

- Power supply: 28VDC
- Power consumption: 20W
- Software: DO-178 Level A
- Hardware: DO-254 Level A

Production lead time

Products are normally produced within 6 months from receipt of orders

Existing aircraft

Our steering controllers are fitted to the following aircraft:

- Mitsubishi Regional Jet
- Embraer KC-390
- Gulfstream G500/G600

G500 Nose Wheel Steering Control Unit

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