



# Door Control

High Integrity Position Monitoring and Control



## Key features

- Based around Ultra PCS' existing controllers used on the world's most modern aircraft
- Up to Design Assurance Level A - hardware and software
- Control Lane architecture to suit any customer requirement
- Small, lightweight, and reliable

Ultra PCS' new Door Control Units have been developed for the world's most modern aircraft.

Door Control Units have been produced for the monitoring and control of main entry doors, air-stair doors and cargo bay doors. Typical controller functions include:

- Locking and latching of doors
- Door position indication
- Door actuation control
- Door sequencing

The controller receives inputs from inductive position sensors. These sensors report the position of the doors, locks and latches, as well as other features such as cargo bay door struts, ramp toes, parachute deflectors and other associated parts.

Typically, each controller contains 2 printed circuit board assemblies which are mechanically separated to create independent and redundant control lanes, or separated monitor lanes depending on the customer requirement.

The controllers can be configured to perform additional functions such as backup hydraulic control and brake temperature monitoring.

## Existing aircraft

Ultra PCS' door controllers are fitted to the following aircraft:

- Embraer KC-390
- Gulfstream G400/500/600/700/800
- Position Sensor Interfaces for Boeing 787 Doors

# Door Control

Our controllers feature fully automatic Built- In-Test capability. This function monitors the health of its own circuits and also the state of the other actuator and locking components it is controlling.

## Full Design, supply and support service

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

## Development lead time

Design, development, qualification and first delivery within 18 months of contract depending on customer requirements.

## Production lead time

Products are normally produced within 6 months from receipt of orders.

The Controller uses the most modern electronic components to obtain the best function, highest reliability and lowest cost.

Convection cooled – forced air cooling is not required.

## Key features

- Power supply: 28VDC
- Typical power consumption: 20W
- Weight typically less than 3.5kg
- Dimensions typically: 360 x 61 x 200mm
- Software: Up to DO-178 Level A
- Hardware: Up to DO-254 Level A
- Proximity sensor inputs: Up to 32 per unit

