

Avionics and Instrumentation

HIGH DATA-RATE

ZONE 2

# Instrument Panel Console and Equipment Rack Within the forward fuselage

The instrument panel console and equipment rack zone of the aircraft, Zone 2, is housed within the forward section of the fuselage. Zone 2 has the most diverse range of interconnect technologies found in the aircraft, meeting a diverse set of application and performance requirements. This section includes the flight deck with its extensive set of avionic displays, control panels, communications equipment, data uplink and downlink interfaces, antennae, and so on. These equipment sets interface with the avionics and flight management computers located in the lower part of the forward fuselage in the equipment bay. The equipment bay also hosts power panels and power conversion panels located adjacent to the equipment racks. This section of the aircraft may also contain a galley, depending on airline configuration.

Zone 2 Application Guidelines	
Environmental Stress Factors	Applicable RTCA/DO-160 Requirements
Vibration	DO-160 Category S and H (Table 8-1)
Shock	DO-160 Category A, Test Procedure 1
Ground Survival Temperature	-65° to 95°C; DO-160 Category A3 (Table 4-1)
Pressure Differential	Sea level to 10kft; DO-160 Category A3 (Table 4-1)
Operating Temperature	-55° to 85°C; DO-160 category A3 (Table 4-1) with Temperature change rate per DO-160 Category A (10 C min per minute)
Moisture	Exposure to humidity and condensation; DO-160 Category B



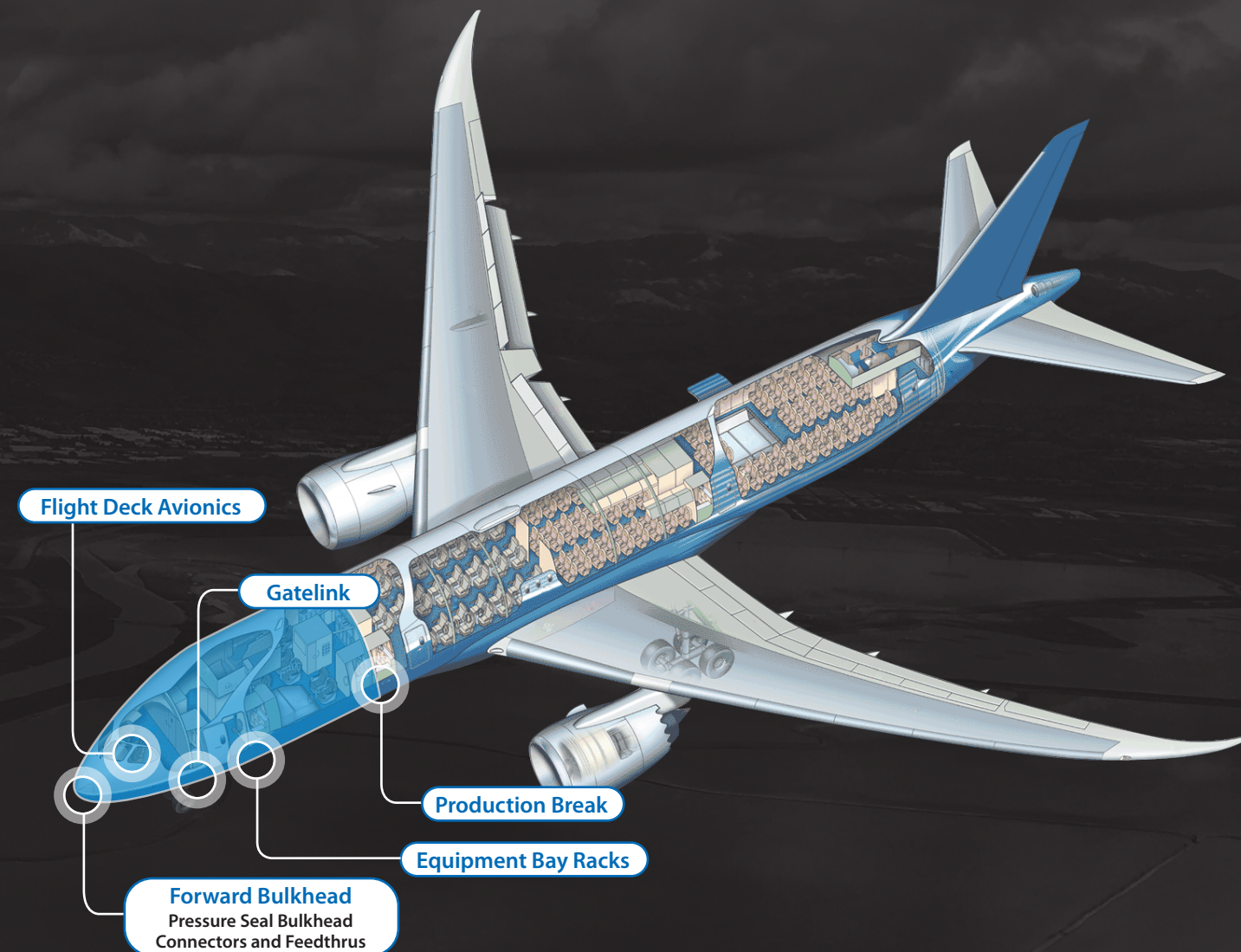
## GateLink Pro™

- High-speed data uplink connector for gate-to-aircraft applications
- Ideally suited for Zone 2
- Durable pogo pin contact system rated to tens of thousands of mating cycles
- Sealed receptacle available with ProSeal™ spring-action protective covers
- Rugged overmolded plug cable (turnkey)
- Environmentally sealed breakaway design
- Proven commercial airframe performance

ZONE 2

## Instrument Panel Console / Equipment Rack

High-Speed, High Data-Rate Interconnect Technologies for Avionic and Electronic Equipment Rack Applications



## THE NEXT-GENERATION HIGH-SPEED ULTRAMINIATURE RECTANGULAR CONNECTOR FOR DEMANDING AEROSPACE APPLICATIONS

- High-speed Ethernet, USB 3.0, HDMI
- Printed circuit board and cable connectors
- Scoop-proof interface
- 12 arrangements, 6 shell sizes for the ultimate in versatility
- Rugged aluminum alloy dual-lobe polarized shells
- Environmentally sealed
- Integrated EMI shielding and grounding
- Blind mating

