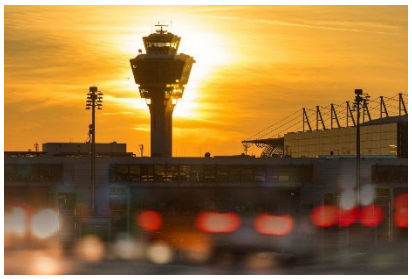
# 5071B Cesium Primary Standard and Frequency Standard Critical Infrastructure

## Learn About 5071B Cesium Primary Standard and Frequency Standard

The 5071B primary time and frequency standard is a replacement for the 5071A that matches the form, fit and functions of its predecessor. All connections and commands remain unchanged. We updated the 5071B's internal electronics with modern circuitry, including our microprocessors (MPUs), to ensure continuity of supply for all components into the next decade and achieve RoHS compliance. We tested the 5071B over 18 months against an extensive set of qualifications to confirm that this device meets or exceeds all performance specifications.


## Critical Infrastructure



- Power grid timescales
- Air traffic control
- Emergency management communication

## Key Features

- < 5E−13 accuracy high-performance models
- < 1E−12 accuracy standard-performance models
- Accuracy levels achieved within 30 minutes of startup
- < 8.5E−13 at 100s high-performance models
- < 2.7E−12 at 100s standard-performance models
- < 1E−14 flicker floor high-performance models
- < 5E−14 flicker floor standard-performance models
- No deterministic frequency drift
- 100 kHz, 1, 5 and 10 MHz RF sine wave outputs
- Three 1 PPS outputs
- Two 1 PPS inputs to steer to external GNSS receiver or other 1 PPS source
- AC and DC operating voltages

- Internal battery back-up for short-term power interruptions