

Federal Aviation Administration, DOT

Pt. 125, App. E

The recorded values must meet the designated range, resolution and accuracy requirements during static and dynamic conditions. Dynamic condition means the parameter is experiencing change at the maximum rate attainable, including the maximum rate of reversal. All data recorded must be correlated in time to within one second.

Parameters	Range	Accuracy (sensor input)	Seconds per sampling interval	Resolution	Remarks
84. Cockpit trim control input position—yaw.	Full Range	±5%	1	0.3% of full range.	Where mechanical means for control input are not available, cockpit display trim positions should be recorded. Trailing edge flaps and cockpit flap control position may each be sampled alternately at 4 second intervals to provide a sample each 0.5 second.
85. Trailing edge flap and cockpit flap control position.	Full Range	±5%	2	0.5% of full range.	
86. Leading edge flap and cockpit flap control position.	Full Range or Discrete.	±5%	1	0.5% of full range.	
87. Ground spoiler position and speed brake selection.	Full Range or Discrete.	±5%	0.5	0.3% of full range	
88. All cockpit flight control input forces (control wheel, control column, rudder pedal) ¹⁸ ¹⁹ .	Full range Control wheel ±70 lbs. Control column ±85 lbs. Rudder pedal ±165 lbs.	±5%	1	0.3% of full range.	
89. Yaw damper status.	Discrete (on/off)	0.5			For fly-by-wire flight control systems, where flight control surface position is a function of the displacement of the control input device only, it is not necessary to record this parameter. For airplanes that have a flight control break away capability that allows either pilot to operate the control independently, record both control force inputs. The control force inputs may be sampled alternately once per 2 seconds to produce the sampling interval of 1.
90. Yaw damper command.	Full range	As installed	0.5	1% of full range.	
91. Standby rudder valve status.	Discrete	0.5			

¹ For A300 B2/B4 airplanes, resolution = 6 seconds.

² For A330/A340 series airplanes, resolution = 0.703°.

³ For A318/A319/A320/A321 series airplanes, resolution = 0.275% (0.088°>0.064°)

For A330/A340 series airplanes, resolution = 2.20% (0.703°>0.064°)

⁴ For A318/A319/A320/A321 series airplanes, resolution = 0.22% (0.088°>0.080°)

For A330/A340 series airplanes, resolution = 1.76% (0.703°>0.080°)

⁵ For A330/A340 series airplanes, resolution = 1.18% (0.703°>0.120°).

For A330/A340 series airplanes, seconds per sampling interval = 1.

⁶ For A330/A340 series airplanes, resolution = 0.783% (0.352°>0.090°)

⁷ For A330/A340 series airplanes, aileron resolution = 0.704% (0.352°>0.100°). For A330/A340 series airplanes, spoiler resolution = 1.406% (0.703°>0.100°).

⁸ For A330/A340 series airplanes, resolution = 0.30% (0.176°>0.12°)

For A330/A340 series airplanes, seconds per sampling interval = 1

⁹ For B-717 series airplanes, resolution = .005g. For Dassault F900C/F900EX airplanes, resolution = .007g.

¹⁰ For A330/A340 series airplanes, resolution = 1.05% (0.250°>0.120°)

¹¹ For A330/A340 series airplanes, resolution = 1.05% (0.250°>0.120°). For A330 B2/B4 series airplanes, resolution = 0.92% (0.230°>0.125°).

¹² For A330/A340 series airplanes, spoiler resolution = 1.406% (0.703°>0.100°).

¹³ For A330/A340 series airplanes, resolution = 0.5°C.

¹⁴ For Dassault F900C/F900EX airplanes, Radio Altitude resolution = 1.25 ft.

¹⁵ For A330/A340 series airplanes, resolution = 0.352 degrees.

¹⁶ For A318/A319/A320/A321 series airplanes, resolution = 4.32%. For A330/A340 series airplanes, resolution is 3.27% of full range for throttle lever angle (TLA); for reverse thrust, reverse throttle lever angle (RLA) resolution is nonlinear over the active reverse thrust range, which is 51.54 degrees to 96.14 degrees. The resolved element is 2.8 degrees uniformly over the entire active reverse thrust range, or 2.9% of the full range value of 96.14 degrees.

¹⁷ For A318/A319/A320/A321 series airplanes, with IAE engines, resolution = 2.58%.

¹⁸ For all aircraft manufactured on or after December 6, 2010, the seconds per sampling interval is 0.125. Each input must be recorded at this rate. Alternately sampling inputs (interleaving) to meet this sampling interval is prohibited.