

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
80. Heads-up display (when an information source is installed).	Discrete(s) "on" or "off".	4.		
81. Para-visual display (when an information source is installed).	Discrete(s) "on" or "off".	1.		
82. Cockpit trim control input position—pitch.	Full Range	±5%	1	0.2% of full range.	Where mechanical means for control inputs are not available, cockpit display trim positions should be recorded.
83. Cockpit trim control input position—roll.	Full Range	±5%	1	0.7% of full range.	Where mechanical means for control inputs are not available, cockpit display trim position should be recorded.
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.
85. Trailing edge flap and cockpit flap control position.	Full Range	±5%	2	0.5% of full range.	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.
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 .	Full Range Control wheel ±70 lbs. Control column ±85 lbs. Rudder pedal ±165 lbs.	±5°	1	0.3% of full range.	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.

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°).

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°).