

Pt. 121, App. M

14 CFR Ch. I (1–19 Edition)

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
42. Throttle/power Lever position. ¹⁶	Full Range	±2%	1 for each lever	2% of full range	For airplanes with non-mechanically linked cockpit engine controls.
43. Additional Engine Parameters.	As installed	As installed	Each engine each second.	2% of full range	Where capacity permits, the preferred priority is indicated vibration level, N2, EGT, Fuel Flow, Fuel Cut-off lever position and N3, unless engine manufacturer recommends otherwise.
44. Traffic Alert and Collision Avoidance System (TCAS).	Discretes	As installed	1 .....	.....	A suitable combination of discretes should be recorded to determine the status of—Combined Control, Vertical Control, Up Advisory, and Down Advisory. (ref. ARINC Characteristic 735 Attachment 6E, TCAS VERTICAL RA DATA OUTPUT WORD.)
45. DME 1 and 2 Distance.	0–200 NM	As installed	4	1 NM	1 mile
46. Nav 1 and 2 Selected Frequency.	Full Range	As installed	4 .....	.....	Sufficient to determine selected frequency
47. Selected barometric setting.	Full Range	±5%	(1 per 64 sec.) ..	0.2% of full range	
48. Selected Altitude.	Full Range	±5%	1	100 ft	
49. Selected speed.	Full Range	±5%	1	1 knot	
50. Selected Mach.	Full Range	±5%	1 .....	.01	
51. Selected vertical speed.	Full Range	±5%	1	100 ft/min	
52. Selected heading.	Full Range	±5%	1	1°	
53. Selected flight path.	Full Range	±5%	1	1°	
54. Selected decision height.	Full Range	±5%	64	1 ft	
55. EFIS display format.	Discrete(s) .....	.....	4 .....	.....	Discretes should show the display system status (e.g., off, normal, fail, composite, sector, plan, nav aids, weather radar, range, copy.
56. Multi-function/Engine Alerts Display format.	Discrete(s) .....	.....	4 .....	.....	Discretes should show the display system status (e.g., off, normal, fail, and the identity of display pages for emergency procedures, need not be recorded.
57. Thrust command. ¹⁷	Full Range	±2%	2	2% of full range.	
58. Thrust target	Full Range	±2%	4	2% of full range	
59. Fuel quantity in CG trim tank.	Full Range	±5%	(1 per 64 sec.) ..	1% of full range	
60. Primary Navigation System Reference.	Discrete GPS, INS, VOR/DME, MLS, Localizer Glideslope.	.....	4 .....	.....	A suitable combination of discretes to determine the Primary Navigation System reference.
61. Ice Detection	Discrete “ice” or “no ice”.	.....	4		
62. Engine warning each engine vibration.	Discrete .....	.....	1		