

Pt. 121, App. M

14 CFR Ch. I (1–1–19 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 | | |