

FAQs: ADS-B certification

Question:

What are the differences between CS-ACNS and AMC 20-24 regarding requirements for ADS-B?

Answer:

There are several differences in terms of parameters required, continuity of the function, ES version used, as shown in this non-exhaustive list:

| | CS-ACNS | AMC 20-24 |
|--|-----------------------|--------------------------------|
| PARAMETERS | | |
| ICAO 24 bit address | Mandatory | Mandatory |
| Aircraft identification | Mandatory | Mandatory |
| Mode A code (incl. disabling function) | Mandatory | Mandatory |
| Special position indication (SPI or IDENT) | Mandatory | Mandatory |
| Emergency status (incl. emgy indication) | Mandatory | Mandatory* |
| Barometric Pressure altitude (incl NICbaro | Mandatory | Mandatory |
| ADS-B version number | Mandatory, ≥ 2 | Mandatory |
| Horizontal position (incl. NIC, NACp, SDA & SIL) | Mandatory | Mandatory* |
| Horizontal Velocity (E/W,N/S & Hdg/Trk gnd, HRD, NACv) | Mandatory | Recommended |
| Geometric Altitude (HAE) (incl. GVA) | Mandatory | Not Required |
| ADS-B Emitter category | Mandatory | Not Required |
| Aircraft length and width | Mandatory | Not Required |
| GNSS antenna offset | Mandatory | Not Required |
| Vertical rate (Hybrid, Baro, Baro-inertial or GNSS) | Mandatory | Not Required |
| Selected Altitude (MCP/FCU incl status) | If available | Not Required |
| Selected Heading | Not Required | Not Required |
| Barometric pressure setting | If available | Not Required |
| ACAS traffic status (incl. RA active (TCAS II) etc) | If available | Not Required |
| ACAS installed & operating RA capable (TCAS II) | If available | Not Required |
| CONTINUITY | 'remote' | ≤ 2E-4 / F.H. |
| INTEGRITY | 'major' or 'minor' ** | ≤ 1E-5 / F.H. for hor. Pos. |

*: permissible deviations exist

**: dependant upon the parameter. Some parameters are limited to minor due to the historical classification of mode A/C installations.

The term 'remote' corresponds to quantitative probability of 1E-5 / F.H.

The terms 'major' and 'minor' are Failure Condition classifications corresponding to quantitative probability objectives of respectively 1E-5 and 1E-3 / F.H.

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Link: https://www.easa.europa.eu/en/faq/44269