CAN *Newsletter Online*

1,3 KG AND 1,7 KG VERSIONS

Flight data recorder for aerial vehicles

The Sferirec LCR (lightweight crash recorder) by Hensoldt (Germany) combines acquisition and recording functions in one box. Two available CAN interfaces are used e.g. for engine control monitoring.

The devices combine recording of voice, data, and video. The company develops flight data recorders for military aircraft and helicopters since more than 30 years (Source: Hensoldt)

The device is dedicated to equip aircraft platforms and helicopters, as well as business jets and UAVs (unmanned aerial vehicles). Variants dimensioning 80 mm (diameter) × 195 mm (Arinc 408) and 145 mm × 146 mm × 76 mm (Arinc 306) are available. In combination with the on-board full-HD camera FE 320 LCR from Kappa Optronics a crash recording solution is provided.

Cockpit audio recording (at least 2 hours), aircraft data recording (more than 25 hours), airborne image recording (at least 2 hours), and data-link recording (at least 2 hours) is possible with the device. User-specific events in-flight can be recorded by pushing the event button. A bulk erase function with manual selection and a maintenance recording function are offered options.

Beside CAN, the recorder's interfaces include two discrete inputs, five audio inputs, one audio output, two Ethernet interfaces, an SD card slot, a USB 2.0 interface, 12 analog inputs, as well as an EIA-232 interface for an external GPS (global positioning system) receiver. On the rear side the Type MIL 38999 connector is provided. Further interfaces are available to connect the company's additional equipment. Three-axis gyroscope, three-axis accelerometer, an air pressure sensor, a GPS receiver, and an internal temperature sensor are integrated. An RTC (real time clock) and an area microphone are implemented as well. The crash-protected memory proves a data storage capacity of 16 GiB. Operating temperature can range from -40 °C to +70 °C. Power input from 12 V_{DC} to 32 V_{DC} is possible.

Hensoldt comprises the security and defense electronics activities of the Airbus Group, which were spun off from the group in 2017. The ca. 4 000-employees company is a global supplier of sensors for security and surveillance missions. It also develops solutions for radar systems, optronics, and electronic protection systems.

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