

CORONAVIRUS

Ready for the -70 °C of the Covid-19 vaccine?

The manufacturing of the Covid-19 vaccine will require automated storage and transportation systems to operate at -70 °C. Elmo's CAN/CANopen servo drives are able to operate in these kinds of extreme environmental conditions. The company made the test.



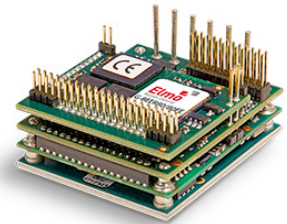
The servo drives are suitable in extreme environmental conditions (Source: Adobe Stock)

The servo drives are designed, manufactured, and tested to meet extreme environmental conditions, explained the company. They are verified, and tested according to environmental, EMC (electromagnetic compatibility), and safety standards. The devices support the CAN-based higher-layer protocol CANopen (CiA 301, CiA 402) as well as 3rd party CiA 401 and CiA 406 devices, and multiple CANopen slaves. The servo drives provide real-time data regarding CAN network status.

The product's regular ambient operating temperature and thermal shock range from -40 °C to +70°C, but the Gold Bee servo drives, for example, have passed the highly accelerated life test (Halt). In the Halt test, the products were pulled well

beyond their environmental specified operation limits under the philosophy of push until it breaks.

The servo drive's temperature was pulled down to start and operate at -75 °C, and then immediately pulled up to +110 °C, while enduring mechanical vibrations of over 30 root mean square acceleration (G_{rms}). This challenge lasted repeatedly for over 48 hours, and the entire batch of Gold Bee products (G-BEE25/100) endured those extreme and extra ordinary conditions without any effect in their operational functionality, the company reported. According to them, the products are a solution for motion control in low temperatures required for automated handling of vaccines.



The company's products are suitable in areas such as automatic robotic warehousing, transportation, and lab automation (Source: Elmo)

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